Clinical Lecture
ON
A CASE OF INTESTINAL OBSTRUCTION.

Delivered at the London Hospital,

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GENTLEMEN,—On being called to a case of intestinal obstruction, the surgeon should first determine whether the cause be without or within the abdomen, and should therefore ascertain the presence or absence of external hernia by a careful examination of its common and uncommon sites. Hernia being absent, he must endeavour to define both the nature and seat of the obstacle, because the former will often point to the latter, and to these ends the history of the case will very materially tend. It is generally accepted that when the symptoms set in suddenly and with severity, the patient having apparently been previously in good health, an acute strangulation of some portion of the bowel, most frequently of the small intestine, but occasionally of the sigmoid flexure, has occurred, and serious pathological change is imminent. On the other hand, when the history is more or less *prolonged*, a climax being at length reached in the shape of complete, or almost complete, obstruction, and with or without vomiting, the obstacle will be found in the large intestine, either in the shape of stricture involving its coats generally, or of some tumour encroaching upon its channel. This classification must not be regarded as absolute, though in a general sense trustworthy, because it will be at once evident that a gradual narrowing of the small intestine at some point will give rise to a *prolonged history*, as in stricture of large intestine; while a sudden twist or strangulation of the large bowel would be attended by sudden and acute symptoms, such as are generally associated with small intestines.

CASE (*Reported by* Mr. H. E. PRICE).—William H——, aged sixty-eight, shoemaker, was admitted Oct. 15th, 1876, under the care of Dr. Bathurst Woodman. He has always enjoyed good health and lived temperately; knows of none in his family having had a tumour. For years past he has passed loose stools, and for the last twelvemonth he has not passed a solid stool; has not passed blood previous to present attack, nor has he had tar-like motions, "nothing resembling blood," and he has suffered no pain. His present illness dates back four weeks before admission, when he was attacked by pain in the lower part of his abdomen, accompanied by diarrhœa, the stools being very watery and always mixed with blood. This continued for a fortnight, when equally suddenly the diarrhœa ceased, the pain increased, the abdomen became distended, and from that time he has had no action of his bowels. Soon after, to the other symptoms was added frequent vomiting, returning everything he took. His vomit has never been stercoraceous. He has been losing flesh and strength fast.

State on admission.—Body much wasted. Abdomen greatly and irregularly distended, tympanitic on percussion, exhibiting here and there the interval between two distended intestines. Examination of the abdomen causes some pain, and this is most marked three inches to the left of the umbilicus. He vomits everything he takes almost immediately; his face exhibits the abdominal aspect; his tongue is dry and coated with a brown fur; breath is very fetid; has hiccough. Examination of chest gives the physical signs of emphysema and bronchitis; examination per rectum gives no assistance to diagnosis.

Oct. 16th.—An enema was given, but without bringing away any fæces.

17th.—The patient was anæsthetised, and Mr. Maunder, who now saw him, attempted to pass his hand up the rectum, but was unable to entirely do so. He succeeded in passing a tube as far as fifteen inches up the bowel, and water injected returned directly; no fæces came away.—10 P.M.: A long tube was passed up again, this time as high as seventeen inches, but without success.

18th.—The vomiting, constipation, and hiccough are persistent. Lumbar colotomy was performed on the *right* side by Mr. Maunder. When the colon was opened a good deal of flatus and some fæces escaped.

19th.—Passed a fairly comfortable night; feels much relieved; several pints of fæces have flowed from the wound. He has had no return of the vomiting, but has hiccough still.—10 P.M.: Comfortable and cheerful; has no pain or vomiting; fæces are constantly flowing.

20th.—Slept well; hiccough persists.—10 P.M.: In the middle of the day he says he broke out into a sweat, but had no shivering.

21st.—Has not passed a good night; is very thirsty; has hiccough still.

22nd.—Feels very weak; has no pain; pulse is feeble, and breathing shallow.

23rd.—Pulse feeble and rapid; complains of pains in his head; is too feeble to talk; appears to be moribund.

24th.—Death by asthenia.

The case before us has a prolonged history, and therefore pointing to the large intestine. Loose stools have been the rule (a condition commonly met with in stricture); blood also has been passed which, in the absence of any history of, or evidence of, the existence of hæmorrhoids, points to malignant disease, the common seat of which is also the large intestine. The surgeon next exposes the abdomen, and finds it greatly distended; percussion elicits generally tympanitis, though the loins may be dull. Coils of distended intestine, too, can be both seen and felt—a condition, Dr. Hilton Fagge thinks, showing hypertrophy of the coats, and indicative of prolonged obstruction. Personally I attach very little value to palpation and percussion, the information gained being unreliable, because, while distended small intestines commonly make the belly prominent, and, as it were, jutting forwards round about the umbilicus, still a coil of it may occupy the position of the transverse colon. Again, distended small intestines, being very movable, may be pushed anywhere and everywhere, and fluids in them naturally gravitating into the loins (the most depending position when the patient is recumbent), dulness would be there elicited as though the colon were distended, and would thus become a possible source of error, unless it proved to be persistent in various positions of the trunk. Pain, unless always referred to the same spot, is of little value as a symptom, a good deal of it being due to distension only; but it is noteworthy that in this case it was most marked about three inches to the left of the umbilicus, a position that would correspond to the cancerous tumour found after death. Such also proved to be the fact in one of my former colotomy cases, and in my case of twist or strangulation by band.

In all cases the rectum must be carefully explored, because stricture is more frequently found there than elsewhere, and if found the nature and seat of the malady are at once recognised. But the absence of a stricture in this region must induce the medical attendant to explore the large intestine higher up by means of the long tube and warm-water injections. This is best done while the patient is under the influence of an anæsthetic. The tube is to be well softened in hot water, and well greased with washed lard (don't use unwashed lard, lest the salt in it irritate the patient's anus), and is to be very slowly introduced, guided by two or three fingers of one hand, also well greased, which have been passed into the rectum not without some force. As the tube slowly travels along the bowel the injection should be pumped in, in advance as it were, so as to open up the collapsed canal and make way for the tube. There are sources of error in connexion with the tube and the enema which must be mentioned. The tube often disappears from the anus, but, on examination, is found to be coiled up in the rectum; again, in one of my colotomy cases, in which constipation was not complete, though vomiting was urgent, the tube could be felt to pass through a stricture at some eighteen inches from the anus, and a very copious enema could be administered. In the present case the tube was introduced seventeen inches, and water injected soon regurgitated—showing, as I thought, that the cause of symptoms was not far off. The post-mortem showed a cancerous mass obstructing the bowel at the junc-

tion of the descending colon with the sigmoid flexure. On two occasions I have been able to introduce my hand into the rectum, and, having detected a stricture, have acted upon information thus gained, and have performed colotomy, the patients being females, but I have not yet succeeded in the male.

Thus, the history of the case, and the positive information obtained by exploration of the lower bowel, made the diagnosis as complete as can be expected, and I had no hesitation in proposing colotomy. In this step my colleague, Dr. Bathurst Woodman, concurred.

Operation.—It is material which loin be selected, and that should be chosen which is nearest above the obstacle. The chief reasons for doing this are that the greater length of bowel may be reserved for nutrient purposes, and may also have the opportunity of quickly emptying itself; otherwise fæces in the intestine between the artificial anus and the stricture, which may be there at the time of operation or may get there afterwards, become, in proportion to their quantity, a source of discomfort to the patient. Thus, the left loin is usually selected. It will, however, occasionally happen, as in the present instance, that it is safer to choose the right loin, in order to be sure that the proposed opening in the colon be above the obstruction.

There are three methods of operation: that of Callisen, by longitudinal incision; that of Bauden, by oblique incision; that of Amussat, by transverse incision. This latter I prefer, because it enables the surgeon to search forwards and backwards for the bowel, should he not reach it at once. It consists in making a transverse incision from three to four inches in length, just a finger's breadth above the crest of the ilium, the centre of which should correspond to a spot the length of the ungual phalanx of the thumb external to the outer border of the erector-spinæ muscle. At this point the loin will be opened at the outer and oblique border of the quadratus lumborum muscle, and in a thin subject I can often detect this spot by drawing my finger from before backwards across the loin with moderate pressure. When accessible, I mark this spot with ink or iodine, and make it the centre of my incision. The integuments, fasciæ, and broad muscles are to be divided layer by layer—on a director, if you please, but I do not use one,—including the lumbar fascia (the origin of the transversalis muscle), and lastly the transversalis fascia, here very thin. Any vessel bleeding should be ligatured, and generally not a tablespoonful of blood is lost. The fat of the region, lobulated, will probably crop up now, either with or without pressure by the hand of an assistant upon the abdomen, and the knife may be laid aside and replaced by two pairs of forceps, with which the operator, either unravelling or removing, if abundant, some of this fat, will expose the intestine, and will recognise it by its greenish hue, possibly by observing a longitudinal band upon it, or by its thickness on picking it up with the finger and thumb. This portion of the bowel, now exposed and uncovered by peritoneum, is to be drawn gently out at the wound. A strong curved needle, armed with a stout silk thread, is to be passed diagonally first through one edge of the wound, then across the portion of bowel that is to be opened, and lastly through the other edge of the wound. Then a second is to be passed at a right angle to the former. The bowel is now to be opened to the extent of an inch by a longitudinal incision. The threads, previously introduced on the needles, will now be found in the interior of the bowel, and should be gently drawn from within it either by the finger or a blunt hook and divided. They will now be equivalent to four sutures, to be at once made to maintain the wound in the bowel patent.

In cutting into the loin I practise section of the soft parts to the least necessary degree, with a view to weaken the abdominal wall as little as possible, so as to prevent undue prolapse. Thus the incision in the skin is much longer than the wound in the lumbar fascia.[1] Also I bring the edges of the anterior half of the wound together with one or two sutures, but allow the posterior portion to gape, and thus to form a channel along which the fæces may flow readily, and not infiltrate the loin.

Caution.—The operator must not mistake the lobulated fat of the loin (an error very easily made) for the colon; nor the kidney for hardened fæces within the bowel. Should the origin of the quadratus lumborum muscle be unusually wide, the edge of its sheath may be nicked, but not otherwise.

After-treatment.—Very little beyond cleanliness is requisite. Sometimes a small warm-water enema is useful to relieve constipation, and hardened fæces on the distal side of the wound may occasionally be removed by a scoop. Should the neighbourhood of the artificial anus become excoriated, it may be painted with castor oil, suggested to me by Mr. Gordon Brown for a similar purpose. A soft pad and a bandage are the only retentive apparatus usually necessary; and Dr. Maguire, of Stony Stratford, writing to me ten weeks subsequent to operation, concerning one of my cases seen by me in consultation with him and Dr. Francis, of Northampton, says:—"The artificial anus is a *perfect success in every way*; it never attracts our attention, and we seldom bestow a thought on it."

The patient whose case is under consideration expressed himself as being much relieved by the operation and "very jolly." Vomiting ceased immediately, and the bowels emptied themselves through the wound. Hiccough, however, persisted, and he died about a week subsequent to operation.

You must understand that the morbid conditions for the relief of which colotomy is performed are various. I have operated thirteen times—eleven in the left and twice in the right loin—for complete obstruction; for incomplete obstruction threatening death by vomiting; for obstinate stricture, both malignant and benign, associated in two instances with a vesico-intestinal fistula; and for painful and bleeding but non-obstructive cancer of the rectum. In the great majority the relief afforded was immediate, and was testified by the patients in the most forcible and unmistakable language. In more than one instance I regretted very much that the operation had not been performed sooner, although it afforded an easy death. This in itself is a sufficient justification for an operation which can be done with comparative facility and rapidity, as easily and as quickly as the majority of operations for strangulated hernia (this patient was not half an hour in the theatre). The subjects being generally thin, the necessary wound is neither long nor deep, and prolonged suppuration need not be anticipated. In one of my patients, aged sixty, the wound about the artificial anus was healed on the third day, and her medical attendant, Mr. Pearce, informed me that on the fifth day this lady sat up and partook of roast mutton, vegetables, and beer. There is little or no bleeding, not a single ligature being requisite sometimes.

[1] See Operative Surgery, second edition, p. 286, by C. F. Maunder.

ON RINGWORM OF THE HEAD, AND ITS MANAGEMENT.[1]

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INTRODUCTORY OBSERVATIONS.

IT is beyond question that the results of the treatment of ringworm of the head are, in the majority of cases, eminently unsatisfactory and disappointing. There are, no doubt, certain special difficulties which stand in the way of a rapid cure of the disease in most instances. But, making due allowance for this fact, the truth of the assertion I have made must be admitted, considering especially that the disease is of the commonest occurrence, and therefore affords abundant opportunity for study; that its proximate cause is well understood; that the essential diseased condition is readily accessible to remedies; and, lastly, that both medical men and those who have charge of ringworm patients are always anxious to get rid of such a potent source of evil, if only on account of the serious consequences of the necessary isolation of the infected demanded by the contagiousness of the disease.

The faults of the existing defective management of ringworm lie in part at the door of the practitioner, and in part

[1] Read in abstract before the West Kent Medico-Chirurgical Society.

at that of persons immediately in charge of ringworm cases, and who fail to carry out effectually the directions of the practitioner. I propose to point out, as briefly as I can, what these faults are, and then to offer some practical observations relative to the diagnosis and treatment of the disease under notice.

In the first place, as a result of the common occurrence of failure in satisfactorily treating ringworm cases, there does unquestionably exist on the part of most practitioners a feeling of dislike to have any dealings with them. The existence of such a feeling is incompatible with that careful examination and thoroughness and determinedness in the choice and use of remedies without which treatment is a failure. This state of things is much to be regretted, because in my own opinion the exercise of a little more trouble and patience would remove the obstacles which commonly stand in the way of a successful dealing with ringworm of the head in the majority of cases, and would reduce the number of obstinate and rebellious instances of the complaint to an inconsiderable minority. The practitioner must generally expect to have his patience tried by the difficulty of getting his directions fully and fairly carried out, and against this he must make due provision.

In the second place, the treatment adopted is based upon an imperfect conception of the mischief to be remedied. Ringworm is a disease due to the growth of a vegetable fungus which insinuates itself about and amongst the shaft and fibres of the hair and epithelial tissues. It is obstinate when the scalp is the seat of disease, from the fact that the parasite effects a lodgment in the deepest part of the hair follicle, and is out of the ready reach of remedies capable of destroying it. The treatment usually employed does not seem to be based upon a sufficient appreciation of this fact. Too much attention is paid to the mere surface changes in ringworm, and decidedly too little stress is laid upon the fact that the difficulty of curing the disease depends essentially upon the existence of the fungus and its active growth at the lowest part of the hair follicle, where it lies ensconced out of the easy reach of parasiticides; its growth being, however, favoured more or less by certain general nutritive conditions. I do not mean to say that practitioners affirm the *superficiality* of the disease in so many words, but I do mean to aver that the treatment adopted suggests that they are unconsciously or seemingly actuated by such a belief. The real object to be kept in view is the removal of the diseased hairs and the fungus in and about them; but attention is too much directed to the state of the scalp itself. For mere eruption, and its degree and results, are of little moment in a therapeutic point of view, except in so far as they are caused by the application of irritants, in which case they are a guide to the extent to and frequency with which the latter may be conveniently repeated.

From the moment a case of ringworm comes under observation until the time that it can with certainty be pronounced well, the condition of the hairs is the chief thing to be watched. The only safe guide to prognosis and to a proper estimate of the progress of the disease towards cure is to be obtained by attention to the state of the hairs of the diseased part. I lay so much stress upon this point because so many fail to recognise its importance, especially in regard to prognosis. I can truthfully say scarcely a week passes but I see cases of ringworm pronounced well because there is no apparent scaliness, and the hair *appears* to be growing fairly well again on the site of the diseased areas, when all the while there are characteristically diseased hairs intermingled with, but perhaps concealed by, healthy ones, or studding over the supposed recovered spot. The recognition of these morbidly altered hairs is not an easy matter in some instances, particularly in light-haired children. It is often necessary to search carefully for them with a good lens and plenty of light, precautions frequently neglected, but only to involve a serious mistake in prognosis or diagnosis. Of course those who do not possess good eyesight, or who discard the lens, wholly overlook the condition.

In the third place, in diagnosing ringworm, it is needful to guard against the error, which is often committed, of considering that there is a general uniformity in its naked-eye features; that, for instance, the diseased surface is always circular in form and scurfy, &c. As I shall point out further on, the disease is not always composed of "rings," but varies greatly in its clinical aspects. Although the circular character of patches may be entirely absent, yet, however, the diseased hairs are always present.

In the fourth place, in dealing with the treatment of the disease in detail, it is of prime consequence to recognise and act upon the fact that the disease, as I have already hinted, varies vastly in the degree of its hold upon the surface, according to the state of health of the attacked subject. General treatment may not be needed in some cases, but it is essential to the cure of the disease in others, and must be formulated in accord with several important considerations. The want of attention to this point greatly encourages blind faith in specifics. No differences are seen in the characters of different cases, and consequently all are treated alike. This topic will be duly noticed.

In the fifth place, the directions given to those who are entrusted with the care of ringworm cases are often not sufficiently explicit and urgent. If the medical practitioner is himself not duly impressed with the necessity of unusual precautions and perseverance in the vigorous treatment of the disease, it is not to be expected that the attendant will appreciate the fact. What is needed is that the mother or nurse in charge of the affected child should be impressed by the practitioner with the conviction that the real difficulty in curing the disease is getting the remedies by due friction to be brought fully into action upon the fungus at the deepest part of the follicle or the root of the hair, and that this difficulty can only be overcome by constant, continuous, and free application, or infriction of remedies, after all hair crusts and other obstacles about the scalp have been carefully removed. Unless this is effected, attendants are satisfied with a mere superficial application of medications. It is not an easy matter to instil this conviction into the minds of attendants, and if in the management of ringworm some blame attaches to the doctor for a due want of appreciation of the point under notice, much more lies at the door of parents and others who are called upon to use the measures prescribed for the cure. Children with ringworm are not ill, and so many parents cannot understand the necessity for the constant supervision of cases by the medical men, and use their own judgment in the matter, even when pains are taken to explain to them the natural difficulties which delay the cure of ringworm. Then the love of quackery and specifics is so very strong amongst the public that, unless the progress is what they themselves decide is proper, they are apt to chop and change about from remedy to remedy upon the recommendation of almost anyone, provided he or she be not medical. It is further assumed that ringworm must be the same in all cases, and what will cure one case should be equally efficacious in another, whereas variations in the state of the general health greatly modify the intensity of the disease in different instances. There are other minor difficulties against which the medical man has to contend, and chief amongst these must be mentioned the desire of parents to retain the hair of children, and their opposition to its removal when really necessary for the ascertainment of the actual amount of disease present, and the prevention of its spread to new points. A great number of cases lapse into a chronic state on account of a want of care in these points. On account of the frequent obstinacy of the disease, the very serious inconvenience and loss of educational advantages contingent upon the banishment of the infected from schools, the pecuniary loss to those who are concerned in education by the breaking out of the pest of ringworm in school, and the consequent paramount importance of checking the disease as speedily as possible, in view of the probable dissemination among the healthy in families, schools, and institutions where the young are congregated, it is imperative that close attention should be given to the lesser as well as the greater matters of therapeutic detail. In regard to no other disease can it be said that it is more needful that the treatment should be conducted with great definiteness and decision, and to that end the preceding general observations, no less than those which follow, I hope may tend.

GENERAL DESCRIPTION OF RINGWORM.

The term "ringworm" is used by most modern writers as a generic designation for the group of diseases caused by the attack upon the skin of vegetable parasites; but popularly it means the common ringworm of schools, which

attacks the scalp and the body, and in that sense I employ it in the succeeding remarks. This common ringworm of the head, or *tinea tonsurans*, and of the body, *tinea circinata*, is caused by the attack of the trichophyton tonsurans. The disease is essentially contagious, the contagious element being the fungus.

Ringworm of the Head attacks children, except in rare instances. It is said not to occur in the adult, but this is a mistake. I have seen even severe cases in adults of from twenty-one to forty years of age.

Ringworm of the Body, which occurs in the form of red scurfy rings, is observed in persons of all ages, but it is more common in the young. The difference in aspect, as compared from ringworm of the scalp, is due to the absence of hair in the one locality and its presence in the other. In hot climates—India, China, South America, &c.—under the influence of heat and moisture the fungus grows very luxuriantly, and the disease is much more severe and extensive, covering large portions or whole regions of the body, in the form of large, well-defined, bright-red, scurfy, itchy, and even infiltrated patches or rings, but I do not purpose to deal with this tropical phase of the disease here.

The fungus (the trichophyton tonsurans) occurs in varying luxuriance. Its rate and power of persistent growth, its rapidity of reproduction, and the special aptitude which it exhibits for certain surfaces, are very different in different instances. Sometimes its growth is very feeble, and it is easily destroyed, and *vice versâ*. The differences in these respects are to be accounted for, not only by the more favourable *nidus* which it meets in some as compared with other persons, but also by the favourable concurrence of external conditions, such as the presence of heat and moisture, as in tropical parts; and likewise anatomical considerations, since in the more hairy parts the fungus, with its predilection for the hair structure as its seat of growth, penetrates more deeply in such localities to the bottom of the follicle, and there nestles out of the reach of agencies that destroy it. In non-hairy parts it is more liable to be killed.

When the fungus effects a lodgment upon the surface it acts in several ways: firstly as an irritant, causing a certain amount of inflammation with attendant redness and effusion, and subsequently desquamation; secondly, it appropriates the moisture, and probably the nutrient material of the hair in hairy parts, and so alters the hairs texturally, rendering them dry, lustreless, and brittle, and subsequently in chronic cases fatty, whilst the mere force of its growth and increase in bulk splits up the hair shaft, and otherwise disorganises its tissues, which it invades; and, thirdly, it destroys and prevents the formation of the root sheaths, and leads to the blockage of the follicles by débris. In non-hairy parts it invades and inflames the epithelial tissues more especially, and the circularity of the tinea patch is due to the fact that the fungus grows and irritates equally in all directions from a common centre.

Practical application.—From this brief general outline of the nature of ringworm it will be evident that there are three main elements of which ringworm is composed.

1. The state of health or nutrition which supplies the *nidus* for the growth of the fungus, or, in other words, the SOIL.
2. The fungus or PARASITE itself.
3. The effects produced upon the tissues by the growth of the parasite.

It is important to bear in mind the composite character of ringworm, because it has a direct bearing upon the successful treatment of the disease. Ringworm is obstinate in proportion as this or that patient offers a favourable soil in his textures for the growth of the fungus or parasite. The skin absorbs sluggishly and scantily even with considerable friction, especially at a diseased site, in ringworm, and in all cases where the mischief has fully established itself in the skin the difficulty of getting parasiticides into contact with the fungus or parasitic elements at the deeper parts of the hair-follicle—and it must be recollected that this reaches to a point below the true skin—is not slight. If the fungus grows languidly—which implies only a slightly favourable soil—it will be the more readily destroyed; but if it grows luxuriantly—it will do this in proportion as the general nutritive condition furnishes a favourable *nidus*—it will be more difficult, because in reality the rate of growth and increase of the fungus may exceed the degree of destructiveness of the inflicted remedy, unless special provision is made that this shall not be the case by general internal measures, as well as greater vigour in the use of local means. In the case of the application of potent remedies, such as blistering fluids, it must be remembered that the parasiticidal operation of the drug does not extend in many cases so deeply as the deepest part of the follicle, and other measures of internal operation are needed to help to starve out the fungus. The curability of ringworm, therefore, is effected not only by the adoption of all that tends to increase the absorption of parasite-killers, but also such general remedies as are calculated to alter the state of nutrition which furnishes the favourable seed-ground for the ringworm growth.

(To be continued.)

CASE OF RHEUMATIC FEVER SUCCESSFULLY ARRESTED IN FIVE DAYS BY THE USE OF SALICIN.

BY K. N. MACDONALD, M.D. ERLUNG., F.R.C.P. ED., &c.

As the treatment of rheumatic fever by salicin is now upon its trial, the following case appears to me a fair instance of the great therapeutic value of that agent, so far as can at present be reasoned from clinical experience.

J. M——, a printer, aged twenty-eight, of dark complexion and spare habit of body, enjoyed very fair health up to September, 1873, when he was seized with an attack of rheumatic fever following an eruption of boils in the axillæ, on which occasion he was confined to his bed for nine weeks with severe pain and swelling in all the large joints, accompanied by a severe pain in the region of the heart, which his then medical attendant assured him implicated that organ.

He made a good recovery, however, and, with the exception of some weakness, he resumed his occupation as before without experiencing any uneasiness until the 10th February, 1877, when, on exposure to damp after a hard day's work, he was seized with rigors, pains in the joints, and a swelling in the left axillary space, similar to, though not perhaps so severe at the commencement, as the attack he had in 1873.

His symptoms increased on the 11th, and I was called in on the 12th, when I found him in the following condition: The large joints of the upper and lower extremities exquisitely tender and swollen, the head and neck immovably fixed, pain in the præcordial region, with a slight systolic bruit heard loudest at the apex, high fever, suffusion of the eyes, great restlessness, sour-smelling sweat, high-coloured urine loaded with urates, and general constitutional disturbance. Temperature 102°, pulse 120 in the minute, furred tongue, constipation, with an insatiable thirst, which rendered him a very helpless object.

I immediately put him upon ten-grain doses of salicin every four hours, at the same time administering a saline mixture containing twenty grains of bicarbonate of potash three times a day, with ten grains of Dover's powder at bedtime, and potash, soda, or lithia water *ad libitum*. The affected joints were wrapped up in cotton wool covered over with oiled silk, and a mustard plaster, followed by a linseed-meal poultice, applied to the region of the heart, a cradle having been placed underneath the bed-clothes to prevent their weight being felt over the knee-joints.

Feb. 13th.—Passed a better night, slept at intervals for a very short time, but in other respects not much improved. Complains of severe headache. The neck, elbows, wrists, knees and ankle-joints exquisitely painful and immovable. Pain in the region of the heart somewhat abated, but increased on leaving off the poultice. Temperature 102°; pulse 115, smaller, and more compressible—in fact, feebler than at yesterday's visit. Continue treatment; spare diet, milk, arrowroot, slops, &c. To take an ounce of castor oil, and a second dose of the Dover's powder after midnight if necessary.

14th.—Passed a restless night. The second dose of Dover's powder gave considerable relief towards morning, the oil

in the meantime having caused a free action of the bowels. The pain in the region of the heart much improved; the systolic bruit is still audible over the same area, without dulness on percussion. Can move the left arm with greater freedom. The pain in the head, which he has got bandaged, still very severe, and in other respects much the same as yesterday. Had slight delirium in the night. Temperature 101°; pulse 112, and rather small. To continue the salicin powders every three hours, and to have a tablespoonful of brandy in soda-water, which he prefers to potash, every four hours; opiate at bedtime as before. He was also ordered sixty grains of bicarbonate of soda in a pint of water; a lotion to be applied to the affected joints; diet as before; body to be frequently rubbed gently with a piece of dry flannel to remove the perspiration.

15th.—Considerable improvement since last report. Can move both arms freely, though still painful. The neck and knee-joints continue much in the same condition, the latter being less swollen. Slept better, and did not perspire so freely. Temperature 101°; pulse 104. Tongue still much furred; appetite greatly impaired; tenderness over the loins, but micturates freely. Pain in the heart almost gone, without change in the physical signs, probably owing to a permanent lesion produced by his former attack. To continue treatment as before. Ordered a lotion composed of an ounce of solution of acetate of ammonia, two drachms of rectified spirits of wine, in eight ounces of rose water; the lotion to be applied with a linen rag to the head when in pain or delirium.

16th.—Much improved this morning; pain in the head almost gone. Slept well, and can move the arms and legs without much pain. Can also turn in bed, and feels in every respect greatly relieved; swelling in the knees almost gone. Temperature 100°; pulse 98. Patient states that he did not perspire much last night, and is rather surprised at his sudden improvement, as he fully expected to be some weeks under treatment.

17th.—The same treatment having been pursued since yesterday, the alkaline medicine was stopped, as the patient expressed himself as quite well so far as the pains in the joints are concerned, and, though still weak, is quite free of pain except slight stiffness in the left arm. Temperature 98°; pulse 80, and rather weak. The systolic bruit is still audible, but in other respects he is quite convalescent. Able to sit up in bed, and to sup porridge and milk, though still a little thirsty. Ordered to continue the salicin for some days, and to keep his bed until completely cured.

20th.—Called on patient this morning, and found him sitting by the fire quite well, and only complaining of weakness, which has since passed away.

Called again on the 28th, and found he had resumed work again.

Commentary.—That this case was one of genuine rheumatic fever I have no doubt—there was no difficulty in the diagnosis; and that under ordinary circumstances it would have continued for some weeks is equally clear. Experience has taught us that these cases do not terminate spontaneously in a few days, even under the hitherto most approved methods of treatment; and that in this case its course was cut short by the salicin does not admit of doubt. How far the alkaline treatment may have influenced the result I am not prepared to say, but I have had sufficient experience in this disease to notice that, as a curative agent, the alkaline treatment in the early stages of rheumatic fever has no more effect upon the disease than so much ditch-water would have. It is therefore incumbent upon us all to give the treatment by salicin a fair and impartial trial. So far as I can judge from this case, I consider it a remedy of great value, if not, indeed, a specific; and, what is more, the case shows that heroic doses are not essential to the production of its specific effects.

Cupar, Fife.

MR. THOMAS DAVIES, of Machynlleth, has been presented with a handsome silver tea and coffee service by the inhabitants of Barmouth (his native town) and the neighbourhood on the occasion of his marriage. The following is a copy of the inscription:—"Presented to Thomas Davies, Esq., M.R.C.S., L.R.C.P., L.M., by his friends at Barmouth, on his marriage, September 12th, 1877."

ACUTE RHEUMATISM, FOLLOWED BY NECROSIS OF THE TIBIÆ AND LEFT RADIUS,

DURING TREATMENT BY SALICIN AND SALICYLIC ACID.

BY G. HERBERT LILLEY, M.D., M.R.C.P.E.,

ASSISTANT MEDICAL OFFICER, WARWICK COUNTY LUNATIC ASYLUM, HATTON; LATE RESIDENT MEDICAL OFFICER, COVENTRY AND WARWICKSHIRE HOSPITAL, COVENTRY, ETC.

I HAVE lately read with considerable interest a paper, by my friend Dr. E. Markham Skerritt, on the Treatment of Acute Rheumatism. Among the complications present in the cases which have come under his observation he only mentions those of the heart and lungs, which frequently accompany attacks of acute rheumatism, whether treated by salicin and the acid, or by the older remedies, bicarbonate of potash, perchloride of iron, &c. Dr. Skerritt's experience has led him, in summing up the merits of the many drugs employed in treating this formidable disease, to observe that salicin and salicylic acid "lessen the chance of complications in the same proportion as they shorten the disease." Doubtless there are many physicians who have given these comparatively new remedies for this disorder an extensive trial, and who speak favourably of the result of their treatment because on some points they have been found valuable, while the complications appearing during their administration would probably have been present under any circumstances. Now, in the case which I am about to mention, I cannot but think that the complication was introduced by the remedy employed, although it might have otherwise arisen. Periostitis is known to follow a course of scarlatina, or typhoid fever, or any acute febrile condition; though I cannot find rheumatic fever particularly mentioned as a starting point. Necrosis is a by no means uncommon sequel to periostitis; but necrosis setting in extensively in the early part of a course of acute rheumatism must certainly open the eyes of the physician in attendance, and justify an inquiry into the cause of its origin.

In reply to a short letter of mine, published in December last, Dr. G. F. Duffey, of Dublin, kindly furnished me with the following memoranda. He says that Professor Koster, of Berlin (?), in the *Berliner Klin Wochenschrift* (July 3rd, 1876), has ascertained by experiment that both living and dead bone is destroyed when placed in a solution of salicylic acid; but that, while spongy bone becomes as soft as leather in a few days when placed in a half-per-cent. solution of this acid, compact bone is more slowly affected. This is shown by the fact that the enamel of the teeth is very slightly affected by it, but the dentine exposed by caries is rapidly destroyed. The effect of the acid on living bone is also shown by the increase of the salts of lime in the urine soon after salicylic acid has been taken. These facts, Dr. Duffey states, were published in the *New York Medical Record* of October 14th.

The history of the case which has somewhat shaken my confidence in the value of salicin as a remedy in acute rheumatism here follows.

W. H. G——, aged thirteen years, employed as a carrier in the brick-fields, was working as usual on Oct. 25th, 1876, when, suffering from extreme heat and perspiration, he drank freely of cold water, and also plunged both legs into buckets of this liquid. He remained for a considerable time standing upright, and with his boots on, in the water, until he felt cooler, and then resumed his work. On the following day rheumatic symptoms set in, with a marked rigor, headache, anorexia, thirst, restlessness, and pain and tenderness all over the body and in the joints—more especially those of the lower extremities. At night the pain became greater, his skin hot, and his whole surface bathed in a profuse perspiration. These symptoms became daily more intensified,

and the legs below the knees were covered on the fourth day with urticarial wheals. On October 30th, the fifth day of the disease, he was admitted into the Coventry Hospital, under the care of Dr. A. W. Read, one of the senior surgeons on the staff, to whom I am indebted for permission to aid in treating the case and to make the following observations.

On admission the morning axillary temperature was 104°, pulse 140, and respiration 30 per minute. I prescribed thirty minims of solution of perchloride of iron with ten minims of tincture of digitalis every four hours, and ordered that the patient should be enveloped in a warm blanket to encourage free perspiration, and that half-grain doses of powdered opium be given occasionally if the joint pain should be very severe. His diet consisted of broth, milk, and lemonade to relieve thirst. In the evening the temperature fell to 102·8°. On the following morning it was 102°, but rose again in the evening to 104°, falling again on the third morning to 102·2°, and rising towards evening to 102·4. On the next morning (Nov. 2nd) great joint pain was complained of, and the treatment was varied, salicin in ten-grain doses being given every three hours, instead of the previous mixture. This considerably relieved the pain, and at the end of four days this remedy was discontinued. During this period the evening temperature remained stationary, and the morning temperature only varied one degree. On the morning of the 2nd the temperature was 101°. On the morning of the 5th it was 100°, and in the evening 102°. Now salicylic acid in ten-grain doses, and dissolved in a solution of acetate of ammonia, was given every three hours in the place of salicin. On the following morning there was a marked fall of the temperature from 102° on the night before to 98°. This remedy was employed for three weeks, but at the end of this length of time it was abandoned for the following reasons. From the morning of the 6th till the evening of the 13th the temperature continued to rise until it reached 104°, corresponding to the temperature of the morning of admission. This unexpected rise was due to the presence of considerable swelling, redness, and tenderness over the right ankle, which was due to the formation of pus. These symptoms, accompanied by other indications of increased pyrexia, led to a change of remedy. The following table will show the somewhat regular rise and fall of temperature night and morning up to the evening of the 24th, when salicin was discontinued:—

Nov. 14th.—Morning temp.	100·6°;	evening temp.	103·6°
„ 15th	„	100·6	„	103·3
„ 16th	„	101	„	102
„ 17th	„	102·2	„	103
„ 18th	„	101·6	„	103·8
„ 19th	„	99·8	„	103·8
„ 20th	„	100·2	„	103·6
„ 21st	„	101	„	104·4
„ 22nd	„	101·1	„	104·2
„ 23rd	„	100·8	„	103·6
„ 24th	„	101·5	„	104·2

Ordered thirty minims of a solution of perchloride of iron with five minims of tincture of digitalis three times a day.

The swelling over the ankle, which was first observed nearly a fortnight since, was now considerably increased and more painful. Poultices of linseed meal and yeast were applied; and a diet of meat, with an egg daily, were substituted for the milk and broth. In addition to this enlargement over the right ankle, one of a similar nature, though to a less extent, was now observed a little above and to the outer side of the left wrist, and the early indications of a similar condition along the front of the left tibia. The patient had been losing flesh considerably for some days past, though his appetite was fairly good. From the time his medicine was changed and the salicin discontinued there had been a total absence of joint pain, and no inconvenience was felt beyond that necessarily occasioned by change of applications to the affected parts. The urine up to the evening of the 24th had been excessively alkaline in reaction, with a specific gravity varying from 1030 to 1010, and an excess of phosphates present. The temperature from the evening of the 24th to the evening of the 29th showed very little encouragement, as the following table will indicate:—

Nov. 25th.—Morning temp.	99·1°;	evening temp.	103·4°
„ 26th	„	99·8	„	103·8
„ 27th	„	99·8	„	103·3
„ 28th	„	99·6	„	103·3
„ 29th	„	100·3	„	103·2

Ordered four ounces of port wine per day. A free incision was now made into the swelling over the right ankle, and a large quantity of pus escaped.

Nov. 30th.—Morning temp. 99·3°; evening temp. 103·6°. Ordered two pints of porter daily in addition to present allowances. Extreme pallor and feebleness, with increasing emaciation, were prominent symptoms, though the appetite had not lessened in the least. A lotion of five grains of sulphate of zinc in an ounce of water was used in the place of the poultices. Pain now had everywhere ceased.

Dec. 1st.—Morning temp.	99·1°;	evening temp.	102·8°
„ 2nd	„	99·7	„	103·4
„ 3rd	„	99·5	„	102
„ 4th	„	100	„	103
„ 5th	„	99·7	„	102·6
„ 6th	„	102·3	„	101·9
„ 7th	„	100·4	„	101·5
„ 8th	„	99·1	„	101·9
„ 9th	„	99·6	„	—

Ordered half an ounce of cod-liver oil twice a day, and twenty minims of solution of iron, one grain of sulphate of quinine, and one ounce of infusion of quassia three times a day.

There was nothing now worth noting in the temperature for some days. On Dec. 13th four separate centres of ulceration appeared along the front of the right tibia; pulse was now 104; breathing normal. On the 16th, the urine on examination was found strongly acid, sp. gr. 1015, no albumen present, or deposit of any kind. Ordered two grains of quinine three times a day in mixture. Morning temperature 100·6°. From this date up to January 4th—the seventy-first day of the fever—the morning and evening temperatures maintained the same regularity of interval, only falling slowly until they stood at 97·8° in the morning, and 99·2° in the evening. On Dec. 22nd a large fluctuating swelling was noticed above the left wrist, to which a poultice was applied, and similar treatment was adopted to the left leg. On Jan. 10th, a mitral regurgitant murmur was distinctly audible. On Jan. 18th, ordered two eggs daily, and an increase of wine from two to four ounces a day. Appetite good; bowels regular; total absence of pain; marked gain of flesh and strength. There was nothing more to observe in the temperature scale, for from this date up till April 18th, though the temperature was taken regularly night and morning, it never reached higher than 100°, and only twice during this period did it approach this standard. On Jan. 24th a piece of diseased bone, about an inch in length, came away from the left radius. On Feb. 3rd, I administered chloroform for Dr. Read, who removed a great quantity of sequestra from both tibiæ, and a small scale or two of dead bone from the left wrist. On Feb. 13th the mitral murmur had entirely disappeared. On the 20th some more small pieces of bone were removed from the affected wrist. On March 16th another piece of bone was removed from the radius, of about two inches in length.

On April 18th patient was discharged from the wards, and was so far improved that he was able to attend as an out-patient. In the course of a few weeks he was able to take short walks by the aid of two sticks, and when he called to see me early in June his wrist was perfectly well. I hear he is still under Dr. Read's care, and has undergone several more operations for necrosis since I last saw him. There is yet considerable bone disease going on, which will require further surgical interference when sufficiently advanced.

Before concluding, it is perhaps fair to mention one or two facts in connexion with the boy's history, which should have been noted earlier. He is of a strumous family; his father was a great drinker, and the poor lad, the eldest of six children, was compelled to support by hard work his mother and five younger brothers and sisters. One of the younger brothers is suffering at the present time from strumous arthritis. However, the patient was in perfect health up to the day when he exposed himself to the sudden chill. It may be difficult to say whether any disease might not have been the means of inducing necrosis in a subject of such a

temperament as his; but Prof. Koster's experiments, coupled with the rarity of this as a sequel to acute rheumatism, and the date of the appearance of the complication during the course of treatment by salicin and salicylic acid, render it by no means improbable to my mind that the bone disease was an artificial rather than a natural production.

Hatton, Warwick.

TREATMENT BY SALICYLIC ACID.

BY D. R. JONES, L.S.A.

THE following case is within my experience a peculiar one, and in looking through THE LANCET for the past twelve months for records of treatment by salicin, salicylic acid, and salicylates, I find it to correspond very nearly with the two cases in the Radcliffe Infirmary, Oxford, reported by Dr. Tuckwell in THE LANCET (vol. ii. 1876, p. 681), and with none others.

W. T——, aged about thirty-five, a man of weak intellect, was first seen by me on Sept. 5th, 1877, about 5 P.M. He had come home from his work quite disabled two or three hours before, but had complained of pain in the back for some days. Now the pain in the back and in the ankles was excruciating. He had felt chilly, and was now bathed in acid-odoured perspiration, with a temperature close to 104°. His tongue was coated with a white fur. I live five miles away from him, but I insisted that the medicine should be sent for at once. Accordingly he began the following mixture in two or three hours from the time I saw him: two drachms and a half of salicylic acid, and three drachms of acetate of potassium, in sixteen ounces of water; one ounce to be taken every three hours.

Sept. 7th.—About 5 P.M., had been very restless and was slightly delirious. Still complained of the back, but not of ankles or of other joints. Temperature 104·2°. To continue mixture.

8th.—More delirious and restless; said he was quite well. Temperature 102°. To continue mixture.

9th.—Still equally delirious; handled all his limbs in his delirium. Temperature 100·2°; pulse slightly intermittent. Heart-sounds normal. Mixture had been finished in the night, and he had been without for some eight or ten hours. Was thought by the attendant to be more quiet since he had resumed it.

10th.—Temperature 99°; pulse slow, but intermittent; utterly unconscious of persons and objects around; respiration loud and sighing; very restless; involuntary evacuation of urine. Mixture to be discontinued.

11th.—Still very delirious, but was able to recognise me. Temperature normal; pulse still slightly intermittent; urine sometimes passed involuntarily.

12th.—Met Mr. Powell in consultation, who concurred with my treatment. Pulse and temperature normal; urine and fæces had been passed involuntarily since yesterday.

On the night of the 12th he had a draught of chloral hydrate and bromide of potassium, of each thirty grains, divided into three oft-repeated doses. Slept for short intervals. Since then his intellect has regained its normal strength, and he has long ago returned to his care of the kennel.

I have omitted to say that he continued to perspire profusely till after leaving off the medicine, and that his urine, which was throughout remarkably free from sediment, was for some days of a greenish tint.

Dr. Tuckwell, in a subsequent number, in reply to Dr. Havilland Hall, tells us that an appreciable quantity of carbolic acid was detected in the salicylic acid he used. I used two different samples in this case. The first sample was used in several other cases with the happiest results. The second was also used simultaneously in two other cases, without these symptoms; in one of them with extremely happy results. This patient had had three previous attacks, very prolonged. The fourth came in very severely, but at once subsided with the salicylic acid. I may further remark that the acid was in this case only given in ten-grain doses every three hours. Dr. Tuckwell had been giving double that amount.

Llandyssul.

IS YELLOW FEVER INFECTIOUS?

BY JASPER CARGILL, L.R.C.P. LOND.

IF this question were submitted to a large number of medical men, I am sure their answers would preponderate in the negative; indeed, I know that the question is very much a vexed one, and for this reason I venture to offer a few remarks thereon, which I hope may not be thought altogether unworthy of attention, inasmuch as the belief, more especially by laymen, that yellow fever is *not* infectious, may lead to disastrous results. I open the question in order to court criticism, without which matters of doubt are often left unsolved. I shall proceed at once to state two cases. While at Linstead, St. Thomas-in-the-Vale, in 1868, I was called to see a coloured man (almost black), a native of Jamaica, who resided at Rio Magna. I must here remark that Rio Magna is one of the cool hill districts about thirty-eight miles from Kingston, and at a considerable elevation above the level of the sea. On arriving at the house of my patient, I found him in the last stage of yellow fever. He had been ill altogether five days, and I came just in time to see him throw up a basinful of black vomit. There was suppression of urine, but I managed to draw off a few drachms of highly albuminous urine with a catheter. There was epistaxis and jaundice. The man died a few hours after I saw him. His wife, a brown woman, who was pregnant at the time, took the disease six days after the death of her husband, and died in four days. There was more hæmorrhage in her case, and her symptoms were, if possible, more virulent than her husband's. I was naturally struck with the peculiarity of these cases, as there was no fever of any kind whatever prevailing in the district at the time, and on making inquiries I was informed that the man, a small shopkeeper, had gone to Kingston a week before he got ill to receive some goods which he had imported, and that he, while in Kingston, had slept for two nights on board the ship; that at the time there were several cases of yellow fever in Kingston, chiefly confined to the merchant shipping, and that from this ship a few cases had been sent to the public hospital. This, of course, fully explained the matter; but it might be said that in the man's case the infection originated in the ship itself, making the cause a local one; but this explanation cannot be urged in the wife's case. The condition of pregnancy, of course, rendered her more liable to contract disease than otherwise; but it is so very unusual for natives to get yellow fever, even during epidemics, that I was induced to attach more than usual importance to the evidence of direct infection in these cases; and it is because these patients were coloured natives, who had never been off the island, that I select their cases as a foundation for the argument in favour of infection in yellow fever. Other cases, equally pointing to infection, have occurred in my practice, and to my knowledge in the practice of others, but these have all been among Europeans, and on this account not quite so conclusive as in the Rio Magner cases. I mentioned the facts to the late Dr. Alexander Geddes, an experienced and able practitioner, then practising in Kingston, and he told me that he had seen one instance during the whole of his experience of a *black* man being attacked with yellow fever, and in that case it was clearly in his opinion traced to direct infection, the man being a coal carrier, working at the time between a wharf in Kingston and a steamer in which there were cases of yellow fever. There is no doubt that the man from Rio Magna, residing as he did in the cool country district, was, on that account, more susceptible to the disease than the inhabitants of the lowlands, more especially the seaports; hence it is evident that European settlers, whose duties require them to be frequently in the towns should certainly not reside in the hills. The mere residence in the country parts of Jamaica, especially the cold mountains, prevents to a certain extent the process of acclimatisation, and new comers who reside

in the hills, but spend the heat of the day in the lowlands, returning home in the cool evening, necessarily encounter *sudden* and decided changes of temperature, which assuredly increase the risk of contracting fever, whereas residence altogether in the plains or towns assist acclimatisation, and places individuals in a position to withstand epidemic as well as endemic influences. A medical man is often asked by new comers to Jamaica what is the risk incurred by them before they can be said to be acclimatised. Now the answer to such an important question should by no means be shirked, and while great care should be exercised in not exaggerating the dangers of the tropics, at the same time the risks which undoubtedly do exist, and which always will exist under the best and most perfect sanitary improvements, must be candidly pointed out; for while there is danger in needlessly alarming the newly arrived and producing fear, which of itself is a factor of disease, there is at the same time such a thing as a false assurance of security, which entices people to act imprudently and take liberties with themselves which cannot be indulged in with impunity in a country where the invasion of disease is as notably rapid as convalescence is tedious. One of the chief things to be guarded against is what I have already alluded to—viz., residing in the hills and working in the lowlands. Many a valuable life has been lost from this cause. Of course this only applies to those officials and others whose occupations compel them to be in the towns; but invalids and pleasure-seekers, who come out to Jamaica for change and pleasure, may find in the country districts and hills safe retreats from the much-dreaded fevers of the country.

Of course, in Jamaica all excesses should be guarded against, and I am perfectly sure that there is no excess which more quickly and fatally tells on a new arrival than over-indulgence in alcoholic liquors of all kinds and descriptions; it is better far for one to be a total abstainer than to depart from a strictly temperate mode of living in the slightest degree. I have often been asked "What shall I drink?" and it has puzzled me much to answer the question. I, however, find no difficulty in saying "Whatever you drink, drink moderately; but do not drink brandy." Some men will drink large quantities of iced lemonade and thus destroy their digestion. I once received a letter from a newly-arrived gentleman commencing "This is a *thirsty* country," and not many months after the poor fellow had quenched his thirst in a manner which undoubtedly killed him. Therefore, to the new comer one cannot urge too strongly the necessity of being temperate in all things, for with a change of climate new propensities often arise which must not be indulged in, and after a time one settles down to his old way of behaving, and all will be as well with him in Jamaica as it was in England or elsewhere. Another thing to be avoided is over-indulging one's physical strength. One just out from England feels inclined to do more than it is proper for him to do; but this inclination should be restrained; he should be told that a ten-mile walk in England can be performed with more ease than half the distance in Jamaica. The apathy in the Creole is not laziness, as some assert—it is the natural effect of the climate, which guides one instinctively, as it were, to moderate and economise one's vital powers. Growth in the tropics is rapid, and so is decay if one attempts to run the race of life too fast.

The night air should be avoided even more than the mid-day sun. An experience of fifteen years' practice in Jamaica has convinced me that there is more to be feared in "the pestilence that walketh in darkness" than in "the destruction that wasteth at noon-day." New arrivals should not select, if possible, the fall of the year for going out. They should avoid arriving in Jamaica just before or just after the October seasons, for it is during these periods that fevers generally prevail. By the term "fevers" I do not necessarily mean yellow fever; I allude more especially to remittent and intermittent fevers; but everyone who has had any experience whatever in Jamaica must know that what may cause these fevers in the acclimatised and natives may cause bilious, remittent, and yellow fever in the new comer.

I fear I have somewhat digressed from the title of this short paper; but I have been induced, while on the subject, to jot down a few remarks which may not be uninteresting to those whose duties may take them to the "Isle of Springs."

St. Andrew, Jamaica.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

VASCULAR TUMOUR OF THE SCROTUM; REMOVAL; RECOVERY.—REMARKS.

(Under the care of Mr. RIVINGTON.)

STEPHEN W——, aged twenty-three, was admitted on the 16th January, 1875. The posterior part of the left side of the scrotum was occupied by a tumour larger than a hen's egg and extending into the perineum. Over the surface of the swelling dilated veins were observed; whilst to the touch the tumour felt as if composed of enlarged veins mingled with little nodules of fibrous tissue scattered through it. At first the patient attributed it to a blow which he had received on the testicle a week before his admission, affirming that he never noticed any tumour in the scrotum before the injury, that it came suddenly in consequence of it, and had not since increased in size. On reference to his father (his mother was dead), it was ascertained that when the patient was ten years of age he received a blow in the same spot from his brother's knee whilst they were in bed together; that the part swelled; and that he was attended subsequently by a surgeon, who had leeches applied to the scrotum. Under this treatment the swelling subsided. The patient then admitted the correctness of his father's statement, and said that the swelling had never wholly gone away after the first injury. It seems, therefore, most probable that the tumour was really congenital, although it may have increased in consequence of the blows inflicted on it.

On the 28th of January the tumour was removed *en masse*, by making a longitudinal incision over it and dissecting it out. Two or three ligatures were required. A good deal of swelling occurred during the first few days, and the wound assumed rather an unhealthy aspect. A week after removal secondary hæmorrhage occurred, and the house-surgeon, having failed to stop it with perchloride of iron, applied to Mr. Rivington's colleague, Mr. James Adams, who happened to be at hand. Mr. Adams ligatured a large vessel at the side of the scrotum and arrested the hæmorrhage. Subsequently, the wound granulated healthily and healed well, but the process of repair was remarkably slow.

After removal, macroscopical examination of the tumour showed that it was composed of lobules, connected together by vessels. On cutting into the lobules, exit was given to venous blood. The surfaces of the divided lobules were not uniform in their appearance. One or two exhibited the open mouths of vessels of considerable size, whilst others seemed to be made up of a congeries of enlarged capillaries.

Some microscopical preparations of the lobules examined were made by Mr. Needham, and their appearance accorded with the naked-eye characters. The larger vessels referred to above were evidently veins irregularly dilated, their walls presenting here and there bundles of muscular fibres, whilst in other parts no trace of such elements could be found. Small collections of fat and fibrous tissue were intermingled with the vessels within the lobules. The structure of other lobules was that of ordinary venous nævi.

Remarks by Mr. RIVINGTON.—It might have been conjectured, *à priori*, that vascular tumours would occur with the greatest frequency in the neighbourhood of a part of which erectile tissue is a normal constituent. This is not the case with the scrotum. The comparative rarity with which a vascular tumour is met with in the scrotum may be judged from the fact that the subject was treated for the first time by Mr. Curling in the third edition of his standard work on Diseases of the Testis. Only four cases are there referred to, occurring respectively to M. Robert, M. Ricord, Mr. Henry Johnson, and Mr. Holmes, and to Mr. P. Hewett.

M. Verneuil, who described M. Ricord's case, regards the affection as in all cases congenital. Mr. Curling concurs in this opinion, and much may be advanced in its favour. Two of the cases recorded were undoubtedly congenital, and in the other two the absence of direct evidence does not appear to affect very much the strong presumption in favour of a like origin. The history of the case related above is parallel to that obtained by M. Robert. His patient was twenty years of age, and the tumour had been noticed for twelve years only. My patient was twenty-three, and the tumour first came under his observation when he was ten years of age, and then only in consequence of the contusion of the part to which he attributed its formation. In this view of the patient there was in all probability an element of error as well as of truth. He was incorrect in his belief that the inception of the tumour was due to the blow, but so far correct in that it was at this time that the swelling became large enough to attract his attention. All persons are not observant, and a small swelling at the back of the scrotum, not interfering with comfort in any ordinary position, and unaccompanied by discolouration of the skin, would readily escape detection until injury or inflammation brought it under notice. It seems to me very likely that an increase of a vascular tumour in the scrotum would naturally occur during development of the genital organs and at the approach of puberty. Such increase would render the tumour obnoxious to inflammation or swelling from slight contusion and venereal excitement. One other point may be noted. Are these tumours to be regarded as a surplus formation of the erectile tissue native to the part, or as unrelated to natural erectile tissue as vascular tumours in other situations?

NATIONAL ORTHOPÆDIC HOSPITAL.

WRY-NECK OF INFANTILE ORIGIN IN AN ADULT; TENOTOMY; RECOVERY; REMARKS.

(Under the care of Mr. P. R. FISHER.)

CASES of wry-neck caused by spastic contraction of one sterno-mastoid muscle during infancy, and lasting till adult life, are now rarely met with, in consequence of the recognition of the importance of overcoming the muscular contraction at an early age. Since its relief has been shown to be easily attainable by means of tenotomy and appropriate surgical treatment, it is seldom that an opportunity occurs of observing the serious amount of mischief that results from wry-neck, if the contraction be allowed to continue unrelieved from infancy to adult life. Such an opportunity did present itself in the case of a young woman, aged twenty-one years, recently under Mr. Fisher's care, at the above-named hospital. From the following brief account it will be seen that the resulting deformity was very great, but an interesting feature was the presence of marked symptoms of mental disturbance, which arose from an over-sensitive appreciation of the deformity.

At birth, no deformity was noticed, but between the age of six weeks and nine months there were frequent and severe convulsive fits. At the latter period the mother first observed that the head was not straight, and as the deformity increased, the child was taken to a metropolitan surgeon. No treatment was advised. The same opinion was again taken when the girl was eight years old, and again when she was fourteen, but no measures were recommended that could afford relief. When she was twenty, instrumental treatment was adopted for ten months, under the advice of another surgeon, but little progress was made in reducing the deformity. In July, 1876, being at that time twenty-one years old, she applied at the hospital. The left sterno-mastoid muscle was then very rigid and strongly contracted, its sternal attachment being especially prominent; the right sterno-mastoid was much atrophied, the clavicular portion being scarcely traceable. The head was drawn down to the left side, thrown forwards, and rotated to the right. On measurement the left mastoid process was three inches and a quarter from the left sterno-clavicular joint, the distance between the corresponding points on the right side being six inches and a quarter. The left side of the face was smaller than the right, and by contrast appeared wasted. The left features were dragged below the level of the corresponding ones on the opposite side of the face; the under jaw was rotated to the right and pushed forwards, the upper and lower teeth could not be brought into proper apposition, a space of a quarter of an inch existing between the upper and lower incisors. There was severe rotatory curvature of the spine in the cervical region, compensated for by a long sweeping curve in the dorsal and a shorter curve in the lumbar regions, the convexity of the cervical and lumbar curves being to the right, that of the dorsal to the left side.

On July 13th, Mr. Fisher divided the tendon of the left sterno-cleido-mastoid, a loud snap accompanying the division, which was followed by sharp contraction of the muscle. Some bands of fascia and muscular fibres, which became prominent after section of the sterno-mastoid tendon, were then divided about one inch below the mastoid process. The small wounds were dressed in the usual manner, and the patient ordered to remain in bed.

On July 20th, one week after the operation, measurements taken between the same points as before were on the left side four inches and a quarter, on the right side five inches and a quarter, showing a marked improvement as the result of the operation.

Instrumental treatment was now commenced, the instrument used being of the pattern devised by Mr. William Adams (made by Ernst). This apparatus possesses the advantages of being perfectly adjustable to the deformity, and completely controlling the movements of the head. It is unnecessary to give a detailed report of the treatment; I may state briefly that on December 11th, five months from the date of operation, there was a scarcely appreciable difference between the measurements on the right and left sides, they being respectively five inches and a quarter, and rather more than five inches and one-eighth. So far as position of the head is concerned, this result was therefore most satisfactory.

On April 3rd, when the patient was last seen, great improvement had taken place in the distortion of the face. The obliquity of the features was not so marked; the left side of the face had become more plump; and although, on trying to close the jaws, a space still existed between the upper and lower incisors, yet the position of the lower jaw had so much improved (being no longer rotated to the right, and pushed forwards as before) that the lower row of teeth were not opposite their fellows in the upper jaw. The spinal curvature was also much lessened, the improvement in this respect being far greater than had been anticipated.

The mental disturbance, to which allusion has been made, was a most interesting point in this case. When young, her manner was sensible and intelligent; she possessed good intellectual ability, and received a high-class education, so far as to qualify her for the situation of a governess. As she grew up her deformities increased, the obliquity of features and other facial distortion, together with the spinal curvature, being very noticeable. Although treated with kindness and sympathy by her friends, she, from a morbid fear of being noticed, became shy and unsociable, avoiding as much as possible the society of others. Being at that age when her sex are especially anxious about their personal appearance, and obtaining no hope of relief from her deformity, the idea that she was an object for remark was firmly impressed on her susceptible mind, giving rise to a condition of mental alienation that might almost be described as that of melancholia. To take a situation as governess was, of course, out of the question. When first seen by Mr. Fisher she had a singularly despondent expression, and she was most anxious to obtain a decided opinion that her deformed condition could be improved; and when tenotomy was suggested as the only means of relief, she eagerly desired that the operation should be performed, an unavoidable delay being to her a cause of great disappointment. As her bodily deformity improved, the emotional disturbance of her nervous system became markedly lessened. When last seen she was composed in manner, and had lost her former downcast expression. Her parents also found a most decided change for the better. She recovered from her previous depressed condition of mind and became of a bright and cheerful disposition.

It is unnecessary to speculate on probabilities to show how important it is to overcome, as early as possible, contraction of the sterno-mastoid when arising in infancy. Every year the difficulty of relieving the deformity becomes greater, not merely from increased shortening of the sterno-

mastoid, but also because other muscles on the same side of the neck (the scaleni, trapezius, and platysma) acquire secondary contraction, whilst the muscles on the opposite side become weakened and atrophied. To this secondary contraction of the platysma Mr. Fisher ascribes the main cause in producing that unsightly disfigurement of the face which occurs in these cases, this muscle being intimately connected with the superficial fascia and skin, and its fibres freely interlacing with those of the muscles of expression.

ST. PETER'S PORT HOSPITAL, GUERNSEY.

CEREBRAL VOMITING SIMULATING SEA-SICKNESS.

(Under the care of Dr. AIKMAN.)

THE following notes are of considerable clinical interest:—

On the 8th of September last a young man, aged twenty-eight, a member of an English opera company, was admitted to the hospital for persistent vomiting. Three days previously he had crossed from Jersey in unusually severe weather, and the vomiting, which had commenced on board ship, in no way abated after his arrival.

The patient's answers to questions were so incoherent that cerebral mischief was suspected. The "macula" was solicited, and at once appeared. His gait was unsteady, and he walked upon a broad base, while it was found that he could not stand with his heels together.

Taking into consideration the age of the patient, a syphilitic origin seemed pretty evident, and mercurial ointment was ordered to be rubbed into the groins. A blister was applied to the nape of the neck, and alkaline sedatives were given internally, but were not retained. Twenty-four hours later the creasote mixture was tried, with no better result. A purge of calomel was retained, and acted well. On Sept. 11th, no improvement in his symptoms having taken place, $\frac{1}{17}$ gr. of the perchloride of mercury was administered subcutaneously, and repeated next day, while all medicinal sedatives were discontinued in favour of champagne.

On the 13th the patient was found to be slightly mercurialised, and the vomiting had ceased.

The after-history of the case has fully justified the original diagnosis, and the patient is regaining his faculties under a course of the iodide of potassium. His improvement is readily ascertained by his singing more or less in tune such airs as he had been accustomed to sing during his operatic career.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE ordinary meeting of this Society was held on the 23rd inst., the President, Dr. Charles West, occupying the chair. A paper by Dr. Miller Ord was read. It embraced an account of a little described condition of skin, a general œdematous state unassociated with albuminuria, occurring in adult women, and combined with mental and physical torpidity. Dr. Ord attributed the mental imperfection, to which Sir W. Gull has applied the term "cretinoid," mainly to the impairment of peripheral sensibility. A subject of the affection was shown to the members, and the paper was illustrated further by a series of microscopical preparations

The following is an abstract of the paper "On Œdema (Myxœdema) in the Cretinoid Condition of Adult Women," by WILLIAM M. ORD, M.B., F.R.C.P., physician to St. Thomas's Hospital. Five cases are described, in which the symptom first apparent was general anasarca without albuminuria. The anasarca was, however, different from the anasarca of renal affection, in that while it was general the parts affected did not pit on pressure, and, as there was no gravitation of any fluid, remained equally swollen at all times. In all the cases there was remarkable thickening and broadening of the features, and a slow articulation; there was marked slowness of perception, slowness of thought, and slowness of action, without any actual impairment of intellect. The cases all exhibited the pink tinge of the cheeks, and the spade-like state of the hands described by Sir William Gull in his paper on a Cretinoid condition supervening in Adult Life in Women, and it is remarked that all the cases seen by the author have been in women. The skin generally was harsh and dry, as well as swollen and semi-transparent. There was in all the cases an absence of natural perspiration. There were in none of the cases any indications, either in the urine or in the organs of circulation, of the existence of renal disease. But in two cases which ended fatally after several years of observation renal symptoms appeared before death; that is to say, with the occurrence of fluid anasarca the urine became albuminous, the arteries became tense and thickened, and the heart overgrown. In one case a post-mortem examination was obtained. The kidneys were found to be of normal size, rather tough in consistence, and not notably discoloured. The cortical portion was a little wasted, but the capsule was not adherent. The arteries were everywhere greatly thickened, there was much atheroma in the larger vessels, and the heart was much hypertrophied on the left side, weighing 16½ ounces. There were no other important naked-eye appearances, excepting in the thyroid gland, which was reduced to a third of the natural size, and was tough and fibrous-looking on section. Under the microscope a remarkable overgrowth of the fibrillar element of connective tissue was found in all parts of the body, the fibrils being separated from one another by much larger intervals than usual, the interspace being filled by a transparent material yielding mucin, an excess of the normal cement, with excess of nuclei. Reviewing the cases, the singular train of nervous symptoms are attributed to failure of the action of the skin, and to general want of peripheric stimulation of the nerves. And this condition is traced again to the mucous œdema by which all nerve-ends were encased. It is argued that a steadily maintained stimulation of the central nervous system is a condition of the maintenance of health in the great nervous centres, as in the body at large; and that in such cases as are here described there is an isolation from external influences comparable in a less degree with what is effected by shaving and varnishing a rabbit. The symptoms observed in these cases are compared, one by one, with the symptoms described by Sir William Gull in the paper referred to, and their identity is held to be established. They are then compared with those of cretinism, and again a remarkable agreement is demonstrated. Reference is here made to Mr. Curling's paper on two cases of absence of the thyroid in children suffering from mental infirmity, and in Dr. Hilton Fagge's paper on Sporadic Cretinism in England, where, again, in conjunction with cretinoid symptoms in children, the thyroid gland was absent, or could not be felt. The thyroid gland in the case examined after death having been found to be practically annihilated, owing to the encroachment of the myxœdema upon its natural structure, this case is held to afford confirmation to Dr. Fagge's argument set forth in the above paper. In the last place, it is suggested that such a condition existing early in life, before the development of the intellect and of the organs related therewith, would cause arrest of development through failure of the guiding sensations and stimulations. It is held that the natural process of development of the central nervous organs is directly dependent upon exercise of these organs, set going by impulses from the periphery; that the surroundings of the growing animal "lick it into shape," so to speak; and that the intrusion of an insulating medium will tend to arrest development in proportion to the completeness of insulation. Observation shows that many cretins are "œdematous," and that an œdematous state of the skin is often an indication, in particular cases, that the child so affected will become a cretin. The paper, therefore, suggests that more extended observation may possibly reveal some such connexion in cretinism, as is here asserted, of the cretinoid state of adult women. The ultimate course of the condition, here called myxœdema, remains unexplained.

Dr. HILTON FAGGE said the paper confirmed the observation of the absence of thyroid gland in sporadic cretins. A

double identification was necessary—namely, to identify this "cretinoid" condition of the adult with the sporadic cretinism of children, and to identify the latter with the disease endemic in the Swiss valleys. He thought the first point established, and since hearing the paper he was more than ever persuaded that the adult condition first described by Sir W. Gull resembled the affection met with occasionally in children. Some years ago he had under his care a patient closely resembling the one shown at the meeting, and in that case there were fatty tumours in the triangles of the neck, and if to that be added the wasting condition of the thyroid as observed by Dr. Ord, the analogy between the adult and infantile condition was complete. Dr. Fagge then discussed the question of the identity of sporadic and endemic cretinism. The occurrence of fatty tumours in the neck in the former variety and absence in the latter was not invariable, for Dr. Beach had related a case (Path. Trans., xxvii., p. 316) in which these fatty tumours had disappeared before death; and it was quite possible that the miserable condition of the cretins in the Pyrenees would favour the wasting of these growths, which had not yet been found in the endemic disease. The premature synostosis of the basi-sphenoid and basi-occipital, described by Virchow as an essential factor in the production of cretinism. This early union produced generally a vertical direction of the *clivus*, but in a case examined by Dr. Fagge this was more horizontal than usual. The early ossific union would not, however, prevent moulding processes, although it might arrest growth. Again, the thyroid gland, although usually absent in the sporadic cases, sometimes persists, as in one of Dr. Beach's cases and one of his own. The development of cretinism in certain districts might be explained by the rapid deterioration that occurs in the inhabitants of the Alpine valleys; a deterioration so rapid, that in the Val Pellini no family endures for more than five generations; and in the same way a deterioration of the thyroid gland and consequent development of cretinism might occur in this country. But he could not accept the view brought forward by Dr. Ord, that the myxœdematous condition of the skin was a primary cause of the cretinoid state. He inquired whether analysis had been made of the skin in simple œdema to ascertain the amount of mucin contained in it.—Dr. HEYWOOD SMITH inquired whether there was any marked disturbance of the catamenial function in Dr. Ord's cases, or whether in any of them the uterus was subinvoluted.—The PRESIDENT thought it premature to apply the term "cretinoid" to this condition. In England we know but little of endemic cretinism; even in Derbyshire, where goitre is endemic, cretinism does not prevail more than elsewhere. Sporadic cretinism was by no means limited to the poor; and quite recently he had seen a child, eighteen months of age—a cretin, and the co-twin of a perfectly developed child. It was not uncommon to meet in infants with many of the characters of cretinism associated with cyanosis, or other condition affecting healthy development; but in the cases related by Sir W. Gull and by Dr. Ord the intellectual condition was only part of a profound constitutional state in which many organs were affected, and which culminated in renal disease. Dr. West concluded his remarks by protesting against the premature adoption of a definite nomenclature for conditions the nature and origin of which have still to be ascertained.—Dr. ORD said that in his cases the idea of cretinism was not at first conceived. He regarded them as examples of dropsy without albuminuria; but as they progressed, and the lethargic condition of mind became more and more marked, he was led to associate the cutaneous change with the cerebral defect. In the case examined after death the thyroid was reduced to a mass of mucus-yielding, pulpy tissue. He explained that observations were being made, at his suggestion, upon the amount of mucin yielded by dropsical skin; and as for healthy skin, the quantity of mucin found therein was insignificant. There did not seem to be any relation to uterine disorders in the cases he had seen. In reply to the President, Dr. Ord defended the introduction of names which did not involve theories, but simply denoted ascertained conditions; the word "cretinoid" was simply used to denote a parallelism between the mental condition of these adults and that of the cretin children; whilst "myxœdema" expressed simply the actual state of the skin. It was quite possible that other states besides this one might lead to the same mental condition.

The Society then adjourned.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting on Wednesday, Oct. 3, Dr. Charles West, president, in the chair,—Dr. GALABIN showed a pessary (Zwancke's) which had been worn for six years. The pessary was buried deeply in the vagina amidst a large number of phosphatic calculi. The bladder, vagina, and rectum formed one cloaca.—Dr. ROUTH thought this form of pessary most convenient in practice. The injuries were due to abuse of the instrument.—Dr. ROBERT BARNES thought we should not trust women to remove and replace pessaries, so that it was our duty to select the least objectionable instrument. Zwancke's was open to great objection.—Dr. HICKS thought Zwancke's pessary made of wire the most objectionable form.—The PRESIDENT had introduced Zwancke's pessary into England and found it useful. It was before Hodge's was invented. He had not used it lately.—Dr. WILTSHIRE had seen nothing but harm from the instrument.—Dr. HAYES had seen evil results from other pessaries.—Dr. GODSON had used Zwancke's pessary often and had seen no harm result. He showed a boxwood disc pessary which appeared to have been in use for twenty-six years.—Dr. EDIS had seen ulceration and discharge following the introduction of a Hodge's pessary. A patient should be examined, a week after the introduction of a pessary, to see that it fits.

Dr. W. T. GREENE, M.A., gave a Synopsis of 1500 Consecutive Labours. The total number of cases attended was 1500; of these 300 were primiparæ and 1200 multiparæ. Fourteen women gave birth to twins. There were 6 cases of placenta prævia; 3 of the mothers subsequently died; 2 children were born alive. There were 3 cases of hydatid mole. Of the twin births, in 4 the children were both males, in 6 both females, in 4 male and female. In every case where the twins were of the same sex, there were 2 placentæ, and the membranes were distinct; while in cases where the twins were of different sexes there was only 1 placenta, and the membranes were united. Forceps were used on 51 occasions, turning employed 12 times, and craniotomy had recourse to twice. The total deaths were 12 mothers and 73 infants. Of the latter, 30 were cases in which the children were not of a viable age. The maternal deaths were due to post-partum hæmorrhage, placenta prævia, exhaustion, and puerperal fever. There were several cases of acute specific fevers during the puerperal period, which recovered. The author had not observed idiocy induced by complications during labour. He had used the solution of perchloride of iron to arrest hæmorrhage in placenta prævia with good results.—Dr. BRAXTON HICKS would like to have had a fuller history of the cases which had recovered after puerperal illnesses, for more was to be learned from them than from those that died.—Dr. EDIS said that the maternal mortality was high, and required more explanation than was given in the paper. The number of stillborn children was the usual percentage, but he thought that infant mortality throughout the country was too high owing to want of employment of the forceps.—Dr. BARNES said the average of infant mortality in Dr. Greene's practice was somewhat less than in the Royal Maternity Charity, and could not be fairly referred to want of using the forceps.—Dr. DALY said he gave ergot in almost all cases. Dr. Greene had not referred to external pressure as a means of helping delivery.—Dr. HEYWOOD SMITH asked if there was distinct proof that pelvic cellulitis results from hard labour and use of forceps oftener than from septic absorption?—Dr. EDIS said he had no statistics in proof of it.—Dr. CHALMERS had given ergot, but did not do so now, and does not think his cases last longer in consequence. It might be well for skilled accoucheurs to use the forceps frequently, but it would be bad in general practice.—The PRESIDENT said that the proportion of males to females (726 to 785) was the reverse of the usual proportion (105 to 100). Perhaps illegitimacy explained it. He had an impression that idiocy had a connexion with protracted, difficult, or instrumental labours.—Dr. HAYES thought that statistics could not decide the question of the frequency with which forceps or ergot should be used. Each case should be decided on its own merits. There are certain indications of the likelihood of the occurrence of post-partum hæmorrhage, and in such cases

ergot may be given.—Dr. GALABIN had examined the records of twin cases at Guy's Hospital during twelve years. He found all possible combinations of sex, &c.; though, from the fact that double monsters are always of the same sex, it would be expected that twins having a common amnial sac would be of the same sex.—Dr. GREENE, in reply, said he had noted accurately the proportion of male and female children. There were only two illegitimate. He had observed a large proportion of the children for a long time, and he had not found reason to connect idiocy with any kind of labour. He had given ergot a fair trial, had never found it do good, but harm, giving rise to retention of contents of uterus. He had used the forceps in all the cases he thought them necessary in.

Dr. J. W. AGNEW (Hobart-town, Tasmania) supplied a paper on the Forceps in certain Breech Presentations. The author pointed out the great difficulty met with in delivering certain cases of breech presentation, enumerating the objections raised to the use of the forceps in such cases, when other means failed. Though objections had been raised to their employment, the author thought that recourse might be had to them in some cases where failure had resulted. Two cases in which the instrument had been used with success were detailed.—Dr. BARNES said his experience on the point in question was abundant. He had tried the forceps, and had seen their inefficiency and their danger. They might compress the soft parts above the pelvis and the cord, thus causing asphyxia. Dr. Agnew used leverage; that was good. Breech presentations are of two kinds—one where the legs are bent (this is easy); the other, where the legs are straight, is very difficult. The breech is like a wedge, and the proper treatment is to decompose the wedge by bringing down a foot.—Dr. POOLE suggested the propriety of dividing the symphysis pubis of the child when it is dead in the difficult cases.—Dr. HAYES applied the forceps to the breech when the os was insufficiently dilated for the introduction of the hand. The instrument slipped, but the breech was dragged into the vagina, and a foot was then seized and delivery effected.—Dr. BARNES said anything might be done to diminish the size of the child when it was dead. He thought the lower the breech was the more difficult it would be to seize a foot. He would not drag the breech lower down before seizing a foot.

MEDICAL SOCIETY OF LONDON.

THE ordinary meeting of this Society was held on the 22nd of October, Dr. L. Sedgwick, Vice-President, in the chair. The following gentlemen were elected Fellows of the Society:—Drs. A. Baldock and R. F. Godfrey (Montreal), and Messrs. H. Braithwaite, E. Milner, J. H. Stowers, and H. Weiss.

Mr. J. KNOWSLEY THORNTON read notes of a case of Removal of a large Fibroid Uterus with Outgrowths, and of both Ovaries, which terminated fatally. Stating that a patient whose case was similar, and had been reported by him in the last session of the Society, was now in good health, he proposed to continue to bring forward every case, whether successful or not, upon which he operated by abdominal section for the removal of uterine tumours. He considered pain, hæmorrhage, and size, to be the three factors justifying operation where the social status of the patient was such as to enable her to obtain proper treatment, rest, and nursing. The present case was that of a widow, thirty-eight years of age, who had been forced to give up her occupation of cook, upon which she depended, on account of continued enlargement of the uterine tumour, pain, and hæmorrhage. The operation was performed at the Samaritan Hospital on July 17th, 1877, occupying two hours, the chief difficulties encountered being the dislodgment of the tumour from the pelvis, transfixing and ligaturing the pedicles. Finally the whole cut surface of the broad ligament was laced with a connected chain of strong silk ligatures, a method successfully followed in his previous case, as well as in others of Mr. Spencer Wells. He had used it himself for one or both pedicles in thirty-two ovariotomies, and the result in only one out of the five fatal cases could be attributed to the ligature. The tumour, after removal, weighed 3lb. 13 oz., together with the ovaries. Death took place from rapid septicæmia thirty-five hours after operation. There was no general peritonitis, but some putrid suppuration had occurred around the pedicle. In commenting on the case, Mr. Thornton said that in future cases he should employ a Keith's glass drainage-tube for, at any rate, twenty-four hours after operation; and although not wholly discarding the silk ligature, he thought that silver wire, or some form of catgut, would be found preferable.—Dr. SEDGWICK thought it was well to follow in the steps of Mr. Thornton, who had severely criticised his own operation, and had not hesitated to bring it before the Society. — Dr. ROUTH admired the boldness of the author in performing an operation which was conceivably necessary in some cases, and he would advise that, if possible, the pedicle should be left outside, the ligatures to be catgut, and that the cervix should be transfixed with needles, and an India-rubber ring applied below.—Mr. MAUNDER had invariably used the ligature alone in securing the pedicle in ovariotomy.—Dr. GODSON, commenting upon the justifiability of the operation, inquired the probable duration of the case had no interference been attempted.—Mr. THORNTON, in reply, said that he had not used more than seven ligatures. He was not able to say how long the patient might have lived, but probably only one or two years, and that in the greatest distress and suffering.

A paper was then read by Dr. C. T. Williams upon a case of Persistent Pyrexia in Phthisis reduced by Diet, and a discussion followed, in which Drs. Martin, Dowse, and R. J. Lee took part.

The meeting then adjourned.

PROVINCIAL SOCIETIES.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.—The first monthly meeting of this Society was held on October 11th; Mr. G. B. Morgan, president, in the chair. Mr. H. S. ARMSTRONG, medical officer of health for Newcastle-on-Tyne, presented a report of the cases admitted to the Fever Hospital from March to September inclusive, and said that the town had been particularly healthy during the past summer.—Dr. ARMSTRONG showed a specimen of Tænia and a large bunch of Varicose Veins removed under antiseptic precautions from the leg of a female. The case had done well.—Dr. EMBLETON showed a photograph of Varicose Veins.—Mr. J. D. DIXON exhibited a Hypertrophied Clitoris removed from a prostitute twenty-two years of age.—Dr. BYROM BRAMWELL showed a specimen of Occluded Abdominal Aorta, the vessel being completely blocked below the inferior mesenteric artery. An aneurism, the size of a hen's egg, was situated above this point, and was filled with clot, the outermost layers of which were continuous with the clot in the occluded vessel. The patient from whom the specimen was removed was shown to the Society on December 14th, 1876, as a case of abdominal aneurism with occluded aorta and establishment of the collateral circulation. There was a large infarction in one kidney.—Two patients were exhibited at the meeting. One was a case in which a large portion of the anterior wall of the chest was removed by injury, and was shown by the President. The injury was a very severe one, the skin, muscles, &c., from the clavicle to the ninth rib, were torn away, and the cavity if the right chest extensively opened. The case had done well.—Dr. GIBSON showed a case of Empyema cured by free incision and drainage, and detailed the history of a fatal case treated in the same manner. He advocated a free incision whenever pus was present in the pleural cavity.—Mr. G. B. MORGAN read a paper on External Urethrotomy, advocating Mr. Coulson's operation as improved by Dr. Gouley, of New York, and detailing the histories of two cases in which the operation had been very successful.—Dr. NEWCOMBE read a paper on Antiseptic Precautions in Midwifery.—Dr. PAGE related the details of a case of Lymphosarcoma successfully removed from the neck of a child. The tumour was of large size and very rapid growth.

The incision extended from the scalp to two inches beyond the clavicle in one direction, and for three inches in the other. Strict antiseptic precautions were observed. In ten days the drainage-tubes were removed, and in fourteen days the patient was out of bed.—Dr. G. H. PHILLIPSON reported a case of Ovarian Cancer, and alluded to the conflicting statements which are made with regard to the frequency of primary cancer of the ovary. The following are the office-bearers of this Society for the ensuing session:—President: Mr. J. B. Morgan. Vice-Presidents: Dr. Armstrong, Mr. S. W. Broadbent, Dr. Burnup, Mr. Hawthorn. Secretary: Dr. Byrom Bramwell. Committee: Mr. H. E. Armstrong, Dr. Arnison, Mr. Carr, Dr. Denham, Dr. Eastwood, Dr. Frain, Dr. Hume, Dr. Page, and Dr. Philipson.

MIDLAND MEDICAL SOCIETY.—The annual meeting was held on October 19th. The report of the Council showed that the Society numbered 270 members, that there was a considerable increase in the average attendance of the ordinary meetings, and that the financial state was satisfactory. The inaugural meeting will take place on November 9th, when Mr. Simon, C.B., F.R.S., will deliver an address. The following officers were elected:—President: Dr. Sawyer. Treasurer: Mr. Harmar. Hon. Secs.: Mr. Thomas and Dr. Savage. Members of Council: Messrs. Berry, Watkin Williams, Ross Jordan, Drs. Bassett and Russell.

LIVERPOOL MEDICAL SOCIETY.—An inaugural address was delivered by the President, Dr. Turnbull, F.R.C.P., at the opening meeting on the 11th inst. The number of members and associates having increased of late years, and now reaching 187, it had been found necessary to hold the meetings in the large theatre of the Medical Institution. This marked an epoch in the advancement and progress of their institution, the history of which extends back to a period of nearly a hundred years. Originally founded as a library, a medical society, with a pathological and a microscopical branch, was afterwards added. In urging the Society to encourage microscopical researches, he adverted to the probability that the discovery of the dependence of zymotic diseases upon minute organisms in the blood would lead to a more enlightened treatment of these diseases, so that in time antiseptic treatment would be extended to blood-conditions; and he pointed out the singular fact that most so-called "specific" remedies are anti-fermentative and antiseptic agents, such as arsenic, mercury, quinine, and salicylic acid. He concluded with some suggestions for the effective working of the Society, and urged the members to prosecute the scientific business of the session with energy and vigour.

Reviews and Notices of Books.

The Morphology of the Skull. By W. K. PARKER, F.R.S., and G. T. BETTANY, M.A., B.Sc. London: Macmillan. 1877.

IN this work the development of the skull in the various classes of vertebrate animals is for the first time presented in a condensed and an intelligible form, and the result of a perusal of it will be to satisfy the careful reader that we now really possess some knowledge of one of the most complicated parts of anatomy. The way in this labyrinth was first opened up by the keen insight of Goethe and of Oken, but their conclusions were of a speculative character, and founded only on analogy. A far more solid and substantial basis was given to the suggestion of the poet-philosopher and anatomist, that the skull is to be considered as a succession of modified vertebræ, by the profound and comprehensive observations of Owen. Had Owen's accurate knowledge of adult forms been supplemented by a corresponding familiarity with the process of development, he would have seen how futile was the effort to identify with the spines and processes of the vertebræ such bones as the parietal and frontal, or the petrous portion of the temporal. But embryology was still in its infancy when Owen wrote his great work on the Homologies of the Vertebrate Skeleton; and it was not till Huxley disinterred the accurate and long-buried observations of Rathke, and had pointed out the important bearing the early stages of development had on the proper appreciation of the cranial bones and their homologies, that Parker began his most painstaking and valuable researches, which, published in the Royal Society's Transactions, have placed this accurate observer in the foremost rank of modern biologists. So completely has Mr. Parker made this subject his own that, with the exception of Mr. Huxley, to whom, as he says himself, he has often looked for guidance and counsel, there is not another biologist in England who does not look up to him as a master; and, truly, he deserves his position. Immersed in the cares of practice, he has yet found time in spare moments, and by dint of, as Newton expressed it, "thinking unto it," to open out the most ravelled clue in all this body of ours, and, with rare delicacy of manipulation and steady patience, to trace successive stages in the development of the lower forms of reptilia and fish, which, from their minuteness, would seem to defy all examination. Lastly, he has enabled others to profit by his labours, not only by giving admirably clear descriptions, but by supplementing those descriptions by drawings, unsurpassable in the delicacy of their details and the fidelity of their execution.

The first stage of the dogfish—a cartilaginous fish—is the starting point of the series. In this the simple arrangement of the cartilages in the skull is described. The first pair if the descending trabeculæ cranii are disregarded, being represented by the mandibular cartilage, with its ascending metapterygoid process and its forward palato-quadrate plate; the second pair by the hyoid arch, which is followed by the third, fourth, fifth, sixth, and seventh branchial arches of cartilage with their intermediate clefts. The first stage in the skate follows, showing, in the parts about the mouth, the separation of the metapterygoid cartilage (which subsequently becomes the spiracular cartilage) of the hyo-mandibular element from the upper part of the hyoid arch, which subsequently constitute the means by which the suspension of the jaws is effected, and of the several pharyngo-branchial elements from the branchial cartilages. Then follows the second stage of development, as shown in the dogfish, in which the trabecular and parachordal elements of the basis cranii have coalesced and segmentation of the palato-mandibular and hyoid arches has taken place; so that we now have a palato-quadrate and a Meckelian cartilage, constituting the rudiments of the upper and lower jaws, formed from the anterior arch and a hyo-mandibular and cerato-hyal piece from the second, whilst the remaining cartilaginous arches segment into epibranchial and ceratobranchial segments. The processes by which nasal, optic, and auditory capsules are formed, with the cranial sides and roof, are next traced in the same animals. The development of the skull in the salmon, as a representative of a teleostian fish, is then considered in five stages, and this is succeeded by that of the axolotl in six.

The skull of the frog is considered in the same number of stages. The first stage is that of embryos, from two to three lines long, about the time of hatching; the second, tadpoles, from five to six lines long; the third, perfect tadpoles, one inch long, with hind legs appearing; the fourth, tadpoles with tails disappearing; the fifth stage, frogs of the first summer; and the sixth and last, adult frogs. The reptilia are represented by the snake, so carefully and well described nearly forty years ago by Rathke; birds by the fowl, and mammals by the pig. But it must not be supposed that these are the only types referred to. Many others receive more or less extended notice, such as the siluroids and ganoids amongst fishes; the proteus, siren,

menopome, menobranchus, and tritons amongst the urodela; the bullfrog, toad, dactylethra, and Surinam toad amongst the anura; the turtle, lizard, and crocodile amongst the reptilia. The chief peculiarities in the development of many of the principal divisions of birds, with which Mr. Parker is so intimately acquainted, are also noted, and the same may be remarked of the skulls of mammalia. The difficult points connected with the bones of the tympanum are thus given:—"The upper end of the Meckelian cartilage becomes ossified as the malleus (which is, therefore, a part of the primary lower jaw) and the cartilage extends downwards and forwards between the tympanic bone and the periotic capsule; the processus gracilis of the malleus, lying in the Glaserian fissure between the squamosal and the tympanic is the limit of ossification, the rest of the cartilage becoming gradually obliterated. The hyoid arch is represented by the incus (which equals the hyo-mandibular and columella of the frog, whilst it is the columella minus the stapes of birds), the tympano-hyal, and the styloid process or stylo-hyal. The auditory ossicles are at first altogether outside the tympanic cavity, and as the latter enlarges its mucous membrane is reflected around the ossicles. The stapes is described as having three ossific centres." Elsewhere we learn that the stapes arises from the cutting out of a bung, or periotic plug, from the surrounding cartilage, which remains in the hole out of which it has been cut.

We have thus given our readers some idea of the design and arrangement of the work; to criticise it is impossible, since it is itself the only complete guide we possess in this obscure department. We may, however, observe that the style is perfectly clear, and that there is no ground for the apprehension expressed in the preface, that the necessary limitation of space has rendered the descriptions unintelligible. The work contains a great number of illustrations, nearly all, if not all, of which have been reduced from the longer memoirs of Prof. Parker, published in the course of the last few years. There are, there can be no doubt, some points which future research will elucidate, but we may now be said to possess a thoroughly firm and substantial knowledge of the structure and homologies of the vertebrate skull. Lastly, by the help of an admirable index, the student can, if he so please, study the history of individual bones, or teach comparatively.

On the Prognosis in Cases of Valvular Disease of the Heart. By THOMAS B. PEACOCK, M.D., F.R.C.P., Hon. Consulting Physician to St. Thomas's Hospital. London: J. and A. Churchill. 1877. Pp. 55.

PERSONAL experience in prognosis in heart disease can only be acquired by long years of observation. The cases which are the subjects of calculation present such wide differences in their essential or subordinate details, go on often for a considerable time, and can so rarely be kept in view to their termination, that the experience of a lifetime is needed to furnish even a small basis for accurate generalisation. Dr. Peacock has done well in endeavouring, after his many years of work as a cardiac pathologist, to sum up his conclusions in regard to this important subject. The conclusions, however, merely corroborate and confirm, and do not add to, current professional knowledge. We must remark also that only a small portion of the *brochure*, which is an altered reprint from the St. Thomas's Hospital Reports, is devoted to the subject of prognosis, the larger part being occupied by miscellaneous observations on cardiac pathology and by cases illustrating rare forms of valvular disease. The order of gravity of valvular lesions, in Dr. Peacock's opinion, is aortic regurgitation, mitral regurgitation, mitral obstruction, aortic obstruction. The further elements on which the prognosis is to be based he thus sums up:—(1) The cause of the disease, its duration, and the rapidity with which the symptoms have advanced, as indicating its probable nature and its active or passive character. (2) The degree of impediment to the circulation which it occasions, and the power of the heart to overcome such obstruction. (3) The presence or absence of serious complications and the existence of dropsical symptoms, and of a gouty or rheumatic condition. (4) The circumstances in which the individual is placed, as affording the means of obtaining rest of body and mind and protection against atmospheric changes, together with the proper regulation of diet and facilities for medical treatment. The effects of each form of valve disease are discussed in detail, and the way in which they are related to their cause is very clearly stated.

ON DAVOS AS A HEALTH RESORT.

BY DR. CLIFFORD ALLBUTT.

(*Concluded from page 577.*)

DAVOS is an upland valley in the Grisons,[1] at an elevation of about 5150 feet above the sea. Like the Engadine, the valley is broad in its upper part, so that the sun shines rarely less than six hours on a clear winter's day. The valley may seem lacking in beauty to one fresh from grander scenery, but the secondary ranges which enclose it are very fine, and the pretty lake and the pine forests give some variety to the landscape. Snow mountains and glaciers, fortunately for the patients, are not seen in the main valley, but in the side valleys are within the reach of good walkers. The valley of Davos stretches from N.N.E. to S.S.W., and is about four miles long. It is thus a short valley, and is sheltered in a remarkable way, for not only is it backed by high ranges to the north and on both sides, but it is enclosed at the foot by heights through which the Landwasser has gradually cut its way. Thus the present tarn at Davos is the remnant of the great lake which once occupied the whole basin, and which was slowly drained as the bed of the Landwasser was cut more and more deeply. By this southern bar the villages are protected in great measure from the Föhn or south wind, a wind more dreaded than the keener blasts of the north. The lateral ranges are high and on the sunny side scarcely interrupted; on the other side are three long side valleys stretching to the east. Near the opening of the largest—the Dischma Thal—stands the village of Davos Dörfli, where are some hotels. This spot being thus more open to the east, has the sun sooner in the morning, but this is counterbalanced by its exposure to the east winds, and it lies also rather more in the track of the Föhn wind. The village of Davos-am-Platz is, therefore, now preferred by the local medical men. The climate of Davos differs greatly, of course, in the years and in the seasons. Owing to its elevation and the dryness of the air, the rays of sun are always powerful, so that the solar thermometer often stands quite as high at midday in winter as in summer. The snow-time is from November to April. The beauty of the calm winter weather in these high valleys seems to be wonderful, for not only have strangers rejoiced in them, but Hans Grass, the well-known guide in Pontresina, has spoken to us with enthusiasm of the glorious days they often enjoy there for weeks together. This fine time is often broken, of course, by bad weather. Mr. Waters says of the winter 1870–71, that in November, 1870, they sat out of doors all day (as the patients at Davos are wont to do, drinking their coffee or playing at cards under sunshades) for eight days, and could sit out for parts of nine days more. In December, 1870, they sat out of doors all day for three days, and during parts of the day for ten more days. In January, 1871, they sat out for ten whole days, and in part for eight days. In

[1] It is reached from England by way of Paris, Basel, Zurich, and Landquart—thus far by rail. From Landquart a carriage or diligence reaches Davos in an easy and beautiful day's drive through the Prättigau. There is a daily post all through the winter.

February, 1871, they sat out for sixteen whole days and for six days in part. That is, in these four months they were able to spend the whole of thirty-seven days in the air, sitting or walking, and a part of each of thirty-three days more, making a total of seventy days in all available for sitting out of doors in the four months of midwinter. The change from heat to cold at sundown is, of course, considerable; but it is easy to provide against this, and the hotels are well built and well warmed. Otherwise, the changes of temperature in winter are less than in summer, more rare, and more gradual. The weather in a high Swiss valley in summer is, now-a-days, so well known to tourists that I need not stay to describe it. I would only say that I am told that the enjoyment of winter at Davos is scarcely less than of the summer. The snow, crisp and hard, rarely thawed by the Föhn as often elsewhere, the pure clear sky and genial sunshine encourage walking and sledging parties, from which few invalids need be absent, and the long evenings are varied by dancing, music, amateur theatricals, and the like. The winds at Davos are divided into two classes, the upper and the under winds. Fortunately, at Davos, in winter, the weather, unlike that of the Riviera, is very still, so still that such temperatures as $-7°$ to $-10°$ C. are easily borne. In summer the winds are much more inconvenient. The upper winds are the weather winds, and must be learned from the higher clouds or from vanes upon the loftiest summits read with a telescope. The valley is so well protected that these winds often pass over it unfelt below. The under winds, or valley winds, are purely local in origin and extent, and have no influence on the weather. Of the upper winds, the north is the best for weather and for health. The horrid wind of the north-east rarely blows; it is the south or south-west wind (Föhn) which brings bad weather to the valley, and to the patient languor and debility. From this wind, as I have said, Davos is singularly well sheltered; while the Riviera, on the contrary, is very open to it. The valley wind passes along the valley from N.E. to S.W., and gives its freshness to the summer. It blows from about nine to four o'clock, and is sometimes so keen as to be unpleasant. I remember this summer, at Pontresina, the valley wind was so keen as to make us wrap thick shawls about us in mid-afternoon on our descent from the Capütschin, on the top of which (11,200 ft.) we had lunched, and slept for an hour and a half in the stillness of a perfect day. However, even in summer the valley wind is always tonic, is never treacherous, and is easily avoided when keenest by seeking sheltered sunny spots; in winter, fortunately, it rarely blows. Finally, the air at Davos is, on the average, very dry, and as the soil and strata of the district are dry, mists are rarely or never seen. Mr. Waters, in his valuable treatise, finds that, taking a saturated atmosphere at the average temperature at Davos and at Cannes respectively (i.e., $-9·9°$ C. and $+8·7°$ C.), a cubic metre of air at the former would contain about 2·85 grammes of moisture as against 8·42 grammes at Cannes. Taking the percentage of moisture at Davos, we find, with the north winds, that it varies from 84 to 90 per cent.; during the Föhn it will fall to 80 per cent. It is found that cold air (say $-7°$ to $-9°$ C.), containing so little moisture as this, begins to be irritating and disagreeable to invalids. I was much struck myself by the rapid drying of the air after rain. On examining the wet and dry bulbs after breakfast one morning at the Belvidere during rain, I found the two standing together. In a few hours after, when the rain had ceased, they were standing 10° (Fahr.) apart. The causeways and roads dry rapidly, as also do the roofs of the houses, and other exposed surfaces. It is this comparative dryness and the stillness of the air which makes the cold so easy to bear. The bad season at Davos is the spring—April, and part of May. The thaw at this time, and the stirring of the air, give rise to "influenza colds," and to other catarrhs which in winter are almost unknown. Patients are therefore advised to leave Davos before the thaw, but should remain until the end of March, as they thus escape the prevailing east winds of that month. The Italian lakes or Baden-Baden are recommended as spring resorts.

Such is the climate of Davos, a climate in which no lung lesion among the inhabitants has ever, so far as is known, passed into a degenerative or phthisical stage. Dr. Rüdi tells me, moreover, that all wounds heal quickly in this valley—ulcers, even varicose ulcers, being rare. As to the classes of maladies which are benefited by residence at Davos, I find some difference, more apparent than real, between Drs. Unger and Rüdi. Dr. Unger says that Davos is a cure for pulmonary complaints almost exclusively ("fast ausschliesslich"). Dr. Rüdi would welcome certain other patients. Taking phthisis first, both physicians are agreed in saying, gravely and definitely, that recovery may be almost certainly promised to patients in the first and second stages of phthisis (with infiltrations and cavities, but) still possessed of a fair margin of sound lung and of bodily strength. They lament, as the old sexton lamented to me (for I thought my inquiries imperfect until I had taken the opinion of that expert), that doctors and friends will be so incredibly foolish as to send patients to Davos in a dying state. On the other hand, so marvellous at times are the recoveries of sufferers apparently hopeless, that they are unwilling to draw the line too rigidly. One of the first changes for the better seems to be in the disappearance of the fever. Almost invariably the fever ceases in from three to ten days (the septic poison is extracted and no longer generated), and while present is far more amenable to apyretic treatment. A pint of champagne in the evening is found to be an excellent apyretic for women, and both brandy and quinine are used freely if needed. Both physicians also speak most favourably of the cold bath in the intenser cases of fever, red wine being administered during the bath in doses of half an ounce every five minutes. Dr. Unger names 40° C. as the fever temperature at which he prescribes the bath, and this latter is given at a temperature of 16° C. The bath is continued until the temperature falls to 38·5° C. The douche is largely used by all the physicians at Davos, but Dr. Rüdi and Dr. Unger speak decidedly against its use in febrile cases. Dr. Unger speaks authoritatively here, as he has seen it largely used by Dr. Brehmer, of Gerbersdorf, in such cases. Indeed, it is said that Dr. Brehmer himself has now ceased to use it in the febrile stages. If the fever return during the stay at Davos, these medical men both advise the patient's removal, but its recurrence seems to be rare. Dr. Unger uses packs also in an evening, as the temperature rises, to the point of perspiration; the patient is then rubbed with cold water if this is found comfortable.

I have said more than once that the cold douche of from 5° to 6° C. is used daily by the Davos physicians, as regularly in winter as in summer, when the febrile state is passed. Indeed, they seem to feel their way very cautiously to the douche, though it is used, when adopted, with great vigour. Dr. Rüdi believes in its value as a local agent, and applies it to the parts diseased. Dr. Unger considers its effects to be of a general (*allgemeine*) kind. They find it a most efficient means in those cases in which it is well borne, and when the reaction is good. If there be any tendency to hæmorrhage, however, experience points to its withdrawal. Its duration is from five to forty seconds, according to the state of the patient. Neither of my informants draw any essential distinction, as regards progressive treatment, between tubercular and non-tubercular phthisis, though, of course, general tuberculosis would not be sent to them with much hope of relief. Dr. Unger would, indeed, exclude laryngeal phthisis, but Dr. Rüdi tells me he is very successful with this complaint, and believes his success to be due in part to the climate, in part to his daily washing of the larynx with weak brine. Patients in whom actual breaking-up of lung is proceeding are advised to delay their arrival; those who do best come with catarrh of the apices, infiltration, stationary cavities and hæmoptysis. Upon theoretical grounds it has been said that high elevations favour hæmoptysis. Drs. Unger and Rüdi deny this distinctly. They assert, on the contrary, that hæmorrhagic oozings cease at once at Davos, and, accidental breaches of the larger bloodvessels apart, hæmorrhagic cases show excellent results. Phthisis with neuroses for the most part does not do well; phthisis complicated, that is, with hypochondriasis, primary neuralgias, and the like. Actual cerebro-spinal diseases do badly, and therefore cases with such additions should stay away from Davos. My own impression on reaching Davos was that bronchitic cases would do better elsewhere. It seems that herein I was very wrong indeed. Not only does catarrh of the apices do well there, but cases of chronic bronchitis are amongst the most successful of those treated. In old bronchitis with bronchiectasis in the lower lobes and elsewhere, the offensive expectoration is quickly sweetened, and a tolerably certain cure

predicted. Exceptions to this rule, however, are senile bronchitis, and bronchitis in persons prematurely senile or affected with weak or injured hearts or with Bright's disease. Such cases do badly, and should be treated elsewhere. Emphysema, again, is not welcome at Davos, nor is spasmodic asthma, unless chiefly dependent on bronchial irritation. Heart diseases, as a class, do badly at Davos, and are dismissed if possible. Pleurisies, on the other hand, do well, and chronic effusions of the pleura are quickly driven off. Dr. Rüdi uses the douche to the affected part in chronic pleuritic effusion, with much apparent success. He also faradises the inspiratory muscles (an excellent suggestion), and orders "lung gymnastics." All kinds of Bright's disease both Drs. Unger and Rüdi repel decidedly, but I am not sure that chronic granular kidney in the early stages has been sufficiently observed by these physicians.[2] Of other diseases the best results are in malaria and in anæmia. Convalescents, as a rule, do well; and anæmic and chlorotic girls with amenorrhœa recover rapidly without any medicine. The appetite is improved, and primary assimilation seems to be hastened and favoured.

The recoveries from long-standing malarious poisoning are said to be remarkably good and complete; but I did not see any patients of this class. Rheumatism, speaking generally, is better away; though I conversed with a gentleman convalescent from severe rheumatic fever, who gave an excellent account of himself. Cases of marasmus senilis do badly at Davos, as, indeed, do all diseases of senility. Diseases of the liver, as a rule, do badly ("Leber und Nierenkrankheiten sind alle ausgeschlossen," Unger), and there is a tendency to constipation in many of the patients, due, it may be, to hard water and the astringent Veltliner wine. Dr. Rüdi welcomes cases of catarrh of the stomach; Dr. Unger prefers to send these patients to Tarasp. Ordinary atonic dyspepsia in youngish people does well. It is believed that persons inheriting a disposition to scrofula and phthisis (for "scrofula" in gland and bone does very well at Davos) do well to spend some time at Davos in order to counteract and eradicate such disposition. Careful statistics on these points and on all cases treated at Davos are in course of preparation, and will probably be in the hands of the profession before next winter. Scarcely known to the English, Davos has, however, become widely known to the Germans and Swiss, many hundreds of whom spend the winter there, so that the materials for comparison are tolerably large. As I have said, very little medicine is given, except under special circumstances, and red wine is prescribed as of positive value. Dr. Unger thus summed up his treatment to me with a shrug, "Luft, gemischte, Nahrung, viel Milch aber nicht ausschliesslich, mässige Dosen Alcohol, Oel vielleicht aber nicht zu viel, und überall Luft." A well-known and most accomplished English writer said to me, at Davos, "I was travelling, at Sir W. Jenner's advice, to Egypt. On my way I drifted here. At Coire I could scarcely crawl up to my bedroom, and had fever and profuse sweats. I have been here a month; I never now perspire, I can eat fairly well, and I can walk above the pine trees—i.e., somewhere about 600 ft. to 800 ft. high. Dr. Rüdi said to me, when I came, 'You need no medicine; sit out of doors all day, and get gradually on to your feet.'" So satisfactory did my informant think his improvement that he determined to remain at Davos for the winter, though he dreaded the seclusion, and longed for the charms of the Nile. Dr. Rüdi told me that this gentleman had some infiltration and a cavity. (I may add here that Dr. Rüdi speaks English extremely well.) Although little medicine is given, the doctors themselves manage the douche and the baths when ordered, and they take careful observations on the chest. They have given up the spirometer, as the trick is so soon learnt that a practised patient will beat a healthy but unpractised person. Dr. Rüdi prefers measurements of the chest at stated intervals with the calipers and the cyrtometer. He showed me many interesting series of such measurements.

Finally, as to time of arrival. It seems certain that patients should not arrive later than October, and must leave for a few weeks in April. Two winters and a summer are considered desirable for the complete cure of a case of any severity. I repeatedly asked whether winter or summer is the more favourable season; and I think all my informants, lay and medical, leaned to the winter. The temperature is then more constant and the atmosphere stiller; moreover people are less disposed to play tricks and take liberties in winter than in summer.

Leeds, Oct. 1877.

[2] The blood being under less atmospheric pressure, and evaporation so rapid, I am disposed to believe such patients might, in early stages, be much benefited.

Analytical Records.

GIESSHUBLER NATURAL MINERAL WATER. ROYAL HUNGARIAN BITTER WATER.

(CARLSBAD MINERAL WATER COMPANY, LIMITED, 267, OXFORD-STREET.)

Of these, the former is a mild alkaline table water, agreeable in taste and well aerated. The latter is also slightly alkaline, but is chiefly remarkable for the unusually large quantity of magnesium and sodium sulphates it contains. It is of course an aperient of real power, and as such may be used with confidence.

ELIZABETH VICHY WATER. SAINTE-MARIE VICHY WATERS.

(WILLIAM ARMSTRONG, 86, GREAT TOWER STREET.)

These two waters are very similar in composition. They are antacid, faintly aperient, and to a certain extent tonic in their properties. They strongly resemble the well-known Vichy waters, and indeed are said to come from the same water-bearing strata, but appear to contain a larger proportion of potassium salts.

BIRRESBORN NATURAL MINERAL WATER.

(RAHNSEN AND MACNICOLL, 81, GRACECHURCH-STREET, E.C.)

A mild, antacid, and slightly aperient water, with enough of iron to make it rank among tonics. It is well aerated and pleasant, and, though not a powerful, is, we think, a useful medicinal agent.

LESLIE'S ALMONDISED COD-LIVER OIL; LESLIE'S ALMONDISED CASTOR OIL.

(LESLIE AND CO., LIMITED, WALBROOK.)

These also are preparations in which the natural nauseous taste of the oils is disguised with considerable art. Such preparations possess real importance, for it is often perfectly impossible to administer the oils in their usual form, or, indeed, for patients to retain them.

LIQUOR PHOSPHORI ALBUMATUS.

(W. W. URWICK, 60, ST. GEORGE'S ROAD, SOUTH BELGRAVIA.)

Mr. Urwick described this interesting preparation at the recent meeting of the British Pharmaceutical Conference. Following up some suggestions previously made by Mr. Williams, he succeeded in preparing a mixture containing phosphorus, alcohol, glycerine, albumen, and sugar, which kept unoxidised for a long time. He afterwards found that the addition of a minute quantity of oil of neroli, or of some one of several tinctures, removed the luminosity and disagreeable smell of the phosphorus, while apparently leaving its activity unimpaired. This curious action was exhibited at the meeting by Professor Attfield. The new preparation seems to us to promise very well. It is evidently prepared with great care, and will, we are inclined to think, be found applicable in all cases which require the administration of phosphorus.

TAMAR INDIEN.

(E. GRILLON, 27, RUE DE RAMBUTEAU, PARIS, AND WOOL EXCHANGE, COLEMAN-STREET, LONDON.)

An agreeable and trustworthy laxative lozenge, similar to one we noticed a short time ago. It belongs to a valuable, because mild and safe, class of remedies, and may be adopted with advantage as a household medicine.

THE LANCET.

LONDON: SATURDAY, OCTOBER 27, 1877.

IT is one of the instances of the operation of a principle of compensation, that many of the diseases which are least curable can be most certainly prevented. We see it, for instance, in such diseases as typhoid fever and cholera. The morbid action may be prevented by avoidance of exposure to the cause; but once in operation, as far as we can tell, arrest is impossible. The process of disease may be modified, but cannot be stopped, and must go on until its course is run. The same statement is true of hydrophobia with even more signal exactness. The accumulated experience of many generations emphatically declares that in man it is probably altogether preventable; that it is also entirely incurable. The lessons of the past, however, need, from time to time, reconsideration in the light of the knowledge of the present, and the facts regarding the disease which have appeared in our columns and elsewhere suggest afresh the questions—Is hydrophobia altogether preventable? Is it still a disease for which there is no hope of cure?

It is probable that the entire disappearance of the disease could only be brought about by the disappearance from our midst of the animals from which it is acquired. If rabies in the dog and cat never originates spontaneously, but is always the result of inoculation from another animal suffering from the affection, there is no doubt that the isolation of every animal for a sufficient time would stamp out the disease. But such isolation would have to be maintained for a time exceeding the longest period of the incubation of the disease, and is certainly a measure of quixotic impracticability. It is possible that rabies originates spontaneously, although not in the manner or to the extent imagined by some of the correspondents of the daily press. If so, isolation of animals would only check for a time, it would not extinguish the disease. It is certain that dogs and cats will always exist among us in considerable numbers, and it is therefore almost certain that canine and feline rabies will from time to time occur, and with it the human "lyssa." The question of the diminution of the disease in animals, and therefore in man—a question of great and at the present time very pressing urgency,—resolves itself into two problems: Can anything be done to lessen the number of cases by diminishing the number of the animals among which it occurs, and can more be done than is done to stamp it out on its appearance?

We believe there is no doubt that the number of these domestic animals is in excess of the needs of the community. This statement applies especially to dogs. Cats are, to a large extent, a necessity of civilised life, in order to keep down other animals; and so small a proportion of cases of hydrophobia are traceable to the bite of a cat, that the question with regard to them is less urgent. An enormous number of dogs are of no use except as a source of pleasure, and possibly ethical benefit, to their owners. The number of dogs—especially ill-bred ones—kept in this country might be reduced by one-half without the slightest physical, social, or moral disadvantage to the community, and it is probable that such a reduction in the number of dogs would be attended with a corresponding reduction in the number of cases of canine rabies and human hydrophobia. Further, a large number of the cases have occurred from the bites of dogs kept as pets, or "strange" dogs—i.e., straying dogs—which were not under close surveillance, and were probably therefore also kept for pleasure, and not for use. It is a very rare thing for a man to contract the disease from the bite of a foxhound, although the disease is not at all uncommon in hunting-kennels. This circumstance renders it probable that a great reduction in the number of cases might be effected by a reduction in the number of dogs which are kept, and often very loosely kept, merely as a source of direct gratification to their owners, and by a stricter attention to breeding. For the purposes of a man's companionship or the safety of his house one dog is generally sufficient, and the maintenance of a large number of useless dogs offers great facilities for the recurrence and extension of the disease. By what means such a reduction may best be effected it is scarcely within our province to discuss. The present rapid increase and wide prevalence of the disease clearly renders the case urgent. So far as the measures relating to dogs are concerned, we would specify the following obvious precautions:—(1) The law which enacts that a licence shall be taken out for *every* dog ought to be rigorously enforced. (2) Stray dogs without owners should be at once destroyed. (3) The breed should be improved. It is from the "curs" and "mongrels" the contagion spreads. (4) Greater attention should be bestowed on the essentials of cleanliness and good food. (5) Dogs should never be kept continually chained up. (6) The periodic administration of aperients—castor oil is the best—is necessary. (7) Every dog should wear a collar with the name of the owner engraved upon it.

There is no doubt also that much more might be done to prevent the disease by the isolation and destruction of animals in the early stage of the affection. A considerable proportion of cases of hydrophobia occur in consequence of the bites of animals not supposed at the time of the bite to be rabid, and in some instances the misconception with regard to the nature of the disease persists in spite of the clearest and most pronounced symptoms of rabies. It is of the highest importance, it is indeed absolutely essential for any successful preventive measures, that the disease should be recognised or suspected in its early stages. The ignorance of the characteristic symptoms of canine madness is by no means confined to the lower classes, as recent cases show. It is of great importance that more accurate knowledge of the early manifestation of rabies should be widely diffused, and we think that good service would be done in districts in which it is prevalent by the distribution of accurate descriptions of the disease, such as are at present inaccessible to a large portion of the dog-keeping population. We confess, however, that the case narrated by Sir WILLIAM SMART, in which a dog suffering from undoubted rabies was throughout supposed, even by medical men, to be affected only by distemper, is not reassuring as to the probability that the disease, when it occurs, would be promptly reco-

guised. The case suggests very strongly the need there is for caution and suspicion with regard to all sick dogs, and especially to those which have inflicted bites. All dogs which have received bites, or which have been fighting with strange dogs, should be watched with extreme care, and isolated or destroyed on the first symptoms of disease. Much has been done in diminishing the number of wandering animals, and this is a measure the importance of which cannot be overrated. The indignation which an attempt to interfere with the free spread of the disease by wandering animals at Brighton and elsewhere has excited in the minds of some canophilists is a striking and sad instance of the perversion of judgment and feeling which an unrestrained sentiment may produce.

The next question regarding the prevention of hydrophobia is that of its prophylaxis. How far can the consequences of a bite of a rabid animal be prevented? We need not remind our readers how all measures for this end have failed, with the exception of a thorough cauterisation. But cases are almost daily reported in which cauterisation has apparently failed to prevent the subsequent development of the disease. Illustrations of this are afforded by the cases we have lately published. In almost every case the bite from the dog had been cauterised, and yet the cauterisation did not prevent the development of the disease. In the majority of cases, however, it is evident that some time—usually hours—elapsed after the infliction of the wound before the application of the cautery, and in some it is very probable that the cauterisation was insufficient. Inoculated poison is quickly taken into the blood, or, if not absorbed by the vessels, no doubt rapidly diffuses itself into the adjacent tissues. In spite of its apparently frequent failure, we think that there is strong evidence of the preventive power of early cauterisation. The case related by Sir WILLIAM SMART affords such an illustration of this in the immunity of all the other persons bitten by the rabid dog, that it is probable the poison entered the system of the sufferer in some other way than by the cauterised scratch. The inattention to the latter, on account of the supposed trivial nature of the dog's illness, suggests that there may have been a similar inattention to the dog's saliva, which was no doubt left on the hand. It is reasonable to suppose that the longer the time which has elapsed before the cauterisation, the more deeply should the cauterisation extend into the tissues, and it is probable that in every case in which half an hour has intervened, excision may with advantage be combined with the application of the caustic. The instance mentioned last week by Inspector-General BALFOUR is a striking instance in proof of the safety which such a measure will afford. Of eighteen persons bitten by a rabid dog, the wound of one was excised and cauterised freely by a blacksmith's iron. Two years after the man was still well, but within three months of the bite the other seventeen bitten persons were dead. One such instance as this is of more value as evidence of the efficacy of cauterisation and excision, than a hundred cases in which the cautery or the knife have failed because applied too late or insufficiently. It would be a wise measure if all persons in a district in which rabies was common—as it now is in some parts of the West of England, and indeed in the metropolis—were to carry a point of nitrate of silver in the pocket, so as instantly to cauterise a bitten spot. The testimony of the late Mr. YOUATT as to the efficacy of immediate cauterisation was, it is well known, of the strongest kind. With regard to the effect of amputating bitten parts, we believe there is not sufficient evidence to enable an opinion to be formed.

From the prophylaxis of hydrophobia we turn to the dark subject of the treatment of the developed disease. Alleged specifics have one and all been found to be useless, as far as they have been investigated. The treatment by diaphoresis, lately suggested by two correspondents, is an instance of the evidence adducible in support of most specific remedies. No reason appears in the communication to believe that a single case thus "cured" was an example of the genuine disease. An euthanasia for the unfortunate sufferer from this disease is all that our chief authorities can hope for. But the darkness is not wholly without light. The fact of some cases of hydrophobia having a duration twice as long as others, and the variation in the individual symptoms, suggest the hope that, if some means were discovered of lessening the intensity of the symptoms, and the patient's strength were supported, life might be prolonged until the disease should come to an end. Moreover, there is one isolated case on record in which a method of treatment founded on rational principles is said to have been successful in arresting—in curing—the disease. It consisted in the induction of the full physiological effect of curara—an agent which had before been used in smaller doses by NIEMEYER and others. The case occurred in 1874 in the practice of Dr. OFFENBURG, of Winkrath, and has been recently republished by a contemporary. The patient was a girl aged twenty-four, and the symptoms of hydrophobia appear to have been characteristic, and came on eighty days after an imperfectly cauterised bite of a dog suspected to be rabid. An injection of about a third of a grain of curara was given every fifteen or more minutes, being repeated as soon as the indications of its physiological action began to diminish. The spasms ceased, and a general paralysis ultimately ensued, which at one time rendered some artificial respiration necessary. During the next few days slight spasmodic symptoms were mingled with others, apparently the result of the curara poisoning, but lessened, and finally disappeared on the eighth day. The chief point in which the case differs from others in which the curara has been used is in the larger doses which were employed. We ought soon to know whether curara is of any real service in the disease. Cases are just now only too frequent, and the remedy ought to be thoroughly tried. It would be well if some means were adopted of rendering a supply easily accessible to practitioners who may have the opportunity of testing its value.

WE believe it is no secret that the Governors of St. Thomas's Hospital have a difficult problem, or rather set of problems, to solve in the selection of a new treasurer. The Committee of Governors, who are naturally those best acquainted with the working of the hospital, are required on the office falling vacant, to take into consideration the position and duties of the treasurer, and to modify his status in so far as it may seem desirable. We believe that they have exercised this right in the present instance, for the first

time during a long period, and have decided to propose very radical changes in the duties of the treasurer. In so doing they have been guided by a sense of the impossibility of carrying on the hospital efficiently on the old system, and have drawn largely upon the experience of other hospitals, showing that they fully appreciate the necessity for reform.

We have repeatedly pointed out the evils, many of them obvious and glaring, which resulted from the autocratic position of the late treasurer, and the want of proper control on the part of the governors. At the same time we have allowed that there were some advantages in the centralisation of authority, if not carried beyond proper limits. But it may be seriously questioned whether any one man, however devoted and energetic, can efficiently supervise and control so large an institution, manage its estates and funds, regulate the proceedings of the governors, see that all the staff and executive properly fulfil their duties, supervise all structural alterations—in fact, fulfil all the duties, financial, social, and administrative, which the late treasurer, Sir FRANCIS HICKS, took upon his own shoulders. That he should have failed to do all well is a necessary consequence, and there can be no doubt that the hospital suffered grievously, perhaps irreparably, as a result.

The continuation of the old system would involve not merely a perpetuation of these evils, but their aggravation. The late treasurer had gained experience in the management before he was himself appointed treasurer; and he devoted his energies most zealously to what he believed to be the good of the institution. It cannot then be supposed that anyone unacquainted with the hospital, and unused to such work, could succeed where he failed.

The Committee have therefore wisely determined to propose such changes as shall enable the Treasurer to exercise real control, yet under the supervision of the Governors. We believe that the proposition which they have approved, and which will be submitted to the Governors, is something to this effect. The Treasurer is to be resident, and is to be paid a sufficient salary. To assist him in the duties of hospital management a house committee is to be appointed, consisting of the four almoners and six governors, two of whom shall have been members of the medical staff. At the meetings of the committee, to be held weekly, one of the members of the existing staff, deputed by his colleagues, shall attend, but shall not be allowed to vote. It is clear that such an arrangement, if properly carried out, would not only enable the Treasurer to exercise a constant personal supervision over the management and working of the hospital, but would relieve him from needless responsibility, and be a check on maladministration on his part, whilst it would tend to promote a cordial co-operation between the managers and the staff. But it is not less evident that the resident Treasurer would, of necessity, be prevented from carrying on business, and would occupy a very different position from that under the old *régime*. The Committee believe that it would be easy to find a fit man who has held responsible positions in the army, navy, or civil service. Another alternative proposition, involving the appointment of a resident superintendent to act under a Treasurer appointed on the old system, has not, we believe, received any support, nor can we see any advantage in multiplying officers simply to maintain a useless dignity for the glorification of certain individuals.

And here we touch upon what will be the great difficulty in coming to any practical decision. It is well known that certain great City corporations which have already much power in the governing body, and great social influence, look upon the office of treasurer as a sort of appanage of their own, a dignity to be bestowed upon some one of their own number who has qualified himself by City position and wealth fitly to represent them. No doubt they would consider the interests of the hospital so long as they were secondary to their own, and they may point to men who have shown great administrative ability in City affairs, and have been found capable of equally difficult labour in other spheres. And there is unfortunately no doubt that they purpose resistance by all possible means to that which they regard as an endeavour to wrest from them one of their highly-prized dignities, however much the proposed change might benefit the hospital. We trust, nevertheless, that the majority of the governors will show that they can consider the good of the hospital before all personal and private interests, and will heartily support the committee in the proposed reforms.

Whatever the scheme ultimately adopted, its working will depend upon the man selected, rather than on any other condition or set of conditions. It would be premature to express any very decided opinion upon this subject until the governors have determined on the plan to be chosen. Two names have already been mentioned of men who would in every way be qualified to undertake the duties, if the alternative proposed by the committee is adopted. Of Mr. SIMON we need say little, for his high qualifications are known to all. His long official life, the immense ability which he has displayed in all departments of work, his thorough acquaintance with all details of hospital management and work, and especially of St. Thomas's, mark him out as a man most highly suited to fill the post. If he could be induced to accept it, we believe his appointment would be enthusiastically received by the staff of the hospital and the profession at large; and the governors would find in him a thoroughly efficient and active administrator, and a man whose social position and high reputation would redound to their credit. Even if his tenure of office were a limited one, we believe that his thorough knowledge of the needs of the hospital would make the post a far easier one to his successor, and that his administration might initiate an era of prosperity for St Thomas's.

Of Captain DOUGLAS GALTON less is known, but he has a high reputation, and has mastered the details of hospital construction. Doubtless he would in time become a useful Treasurer, but he would have all to learn, and a term of five years, to which we believe the appointment is to be limited, would be all too short to learn and practise in.

Of those whose names have been suggested for appointment on the old system we need say little. Mr. Alderman STONE has been put forward in support of City interests, as opposed to the wishes and experience of those best qualified to judge what hospital interests are. His appointment would be a triumph of City wealth and love of authority and dignity over the progress and reform of the hospital, and would

itself constitute a strong ground for reconstruction of the charters of our old Royal hospitals. Mr. Alderman STONE will consult his dignity if he retires from the contest. Nor need we mention other names which have been suggested until the Governors have come to some more definite decision on the course to be pursued.

We cannot but hope that, in spite of opposition, the urgently-needed reforms proposed by the Committee will be carried out.

THE manner in which medico-legal inquiries to ascertain "the cause of death" are conducted is generally unsatisfactory. The object in view is not clearly defined, and the steps taken to reach it are neither direct nor logically sequent.

At the outset, confusion arises from the failure to discriminate between "immediate causes," and "predisposing causes." The phrases are familiar, but they convey no distinct notion of fact to the mind of the investigator, or perhaps it would be more accurate to say the line of thought suggested to the medical inquirer is not identical with that present to the mind of the jurist. Until this source of fallacy is eliminated, the process of inquest cannot be precise. Nothing is more obvious than that a deceased person may have been affected with one mortal disease, and died of another; or death may be due to the operation of an immediate cause insufficient or unlikely to produce a fatal result in the absence of a predisposing cause previously acting, or called into operation by some more recent factor. This self-evident truth is admitted, and in a fashion recognised by both law and science; but the legal sense in which it is understood differs wholly from the medical. For example, a patient suffering from cerebral disease dies under conditions which seem to point to neglect, perhaps deprivation of necessaries. In law the "cause of death" will be starvation, while the secondary legal question which arises is whether the previous existence of disease had so enhanced the probabilities of death as to reduce the "immediate cause" to a minimum. In medicine, on the other hand, the "cause of death" will be the disease; and the secondary question, was death hastened by neglect and privation? The two standpoints are widely apart, and the expert in law approaches the subject-matter of the inquiry from a view diametrically opposed to that legitimately occupied by the pathologist. Now, suppose the medical inquirer is taken out of his province, and induced or compelled to pursue the legal investigation; this anomaly inevitably occurs: the scientific aspect of the case is distorted, in fact turned inside out to satisfy the lawyers. It must be evident that the direst confusion will arise. The scientist deserts his proper standpoint, and undertakes a duty for which he is incompetent. Either at the post-mortem examination, or in court he is set to search for a "cause of death" sufficient to satisfy the jurist, and ten to one he lays hold of the first that comes to hand, often the wrong one. Something of this sort of thing occurs in most cases when a medical man is required to give a certificate of the "cause of death" for legal or *quasi*-legal purposes. This is why we are disposed to attach less value to the returns on which the Registrar-General's estimates of the causes of death are based than they are wont to receive at the hands of those who do not closely interrogate the conditions and purposes of registration. The broad object in view is to certify that the death arises from natural causes; the task of carefully weighing and placing the secondary causes which have put an end to life is not commonly undertaken by the medical man certifying, at least for the purposes of the certificate.

In a large and important degree, we believe, the duty devolved on the medical man commissioned to discover the cause of death for legal purposes is complicated and rendered impracticable in any scientific sense by his being compelled to take up the legal standpoint and pursue an unaccustomed line of inquiry. If this impression be justified by the facts, it will be seen that there are only two courses open to the reformer—either the investigation must be made by medical men acting simply as agents of the law, and error will dog every step of the inquiry, or jurists must adopt a rational view of the case, and consent to be bound by the judgment of a medical tribunal. Science can, in its own way and with processes adapted to the work, investigate the "causes of death" in a manner satisfactory to the community, but the function of testing and balancing the weight of evidence contributed by experts must be performed by medical assessors. A lay judge and jury are no more able to appraise and collate the testimony of scientific observers in pathology or medicine than to supervise and determine the value of a complex series of chemical experiments. The appearances, the indications, the *facts* in the one case, are fully as technical, and the processes of induction as recondite, as in the other. The recognition of several sets of causes, "immediate" and "predisposing," "primary" and "secondary," involves an admission of the need of special competency to determine which are the more important; and the inadequate attempt to distinguish these differences creates an element of uncertainty which it is always difficult and often impossible to adjust. The question whether death was due to this or that cause, and whether something else contributed to the result, is one the jurist cannot answer, because the law gives him no light. The "cause of death" must be determined by processes of medical inquiry and medical reasoning; this being ascertained, the jurist may proceed to work out the legal consequences. In the search for that cause and the decision which of several contributory causes produced the death, or how one condition acted and reacted upon the other, he cannot possibly help, and is out of place.

Beginning badly, the method at present pursued grows worse as it proceeds. The jurist, usurping the direction of a task in which he has no proper share, maps out the course to be pursued, and selects the explorers by whom the search is to be prosecuted. He knows nothing of the province to be investigated, and it is scarcely surprising that he should be ignorant of its requirements. Anyone who can perform the manual task of examining a dead body is deemed capable of pronouncing a judgment as to the cause of death. The law does not even leave a loop-hole for the escape of the diffident investigator. Although, perchance, he is conscious of the lack of a necessary acquaintance with pathology, this objection is disallowed. Can anything be more monstrous than

the system in force? The veriest tyro in medicine knows that pathology is a specialty. If the general practitioners of the country were asked to state their opinion and wishes, they would declare that an investigation of "the cause of death" for legal purposes is not a duty they desire to undertake. They would urge, as we have tried to show, that the question is not one which can be decided by a lay tribunal, and the attempt to employ medical men as the agents of such an authority is irrational, and must be unsafe.

We are not disposed to endorse the opinion roundly expressed by certain of our contemporaries, that general practitioners should be as a body disqualified from making post-mortem examinations for legal purposes. The position we take is that every such inquiry should be carried out at the bidding and under the authority of a *medical* tribunal, and that the employment of agents and the valuation of opinions should rest with the body of experts. This is the reform needed, and there is no sufficient obstacle to its being carried into effect. In every case of unexplained death let a commission issue to a competent body of men—either a standing committee of medical jurists or men specially appointed,—and let the primary question, "What was the cause of death?" be adjudicated by this tribunal before the case is submitted to be dealt with by the law. If this course had been pursued in the recent case which has created so much doubt, and we fear scandal, the country would have been spared a needless and most injurious sensation, the law a *fiasco*, and the medical profession a humiliation its services to the cause of humanity have not deserved. It is easy to raise an outcry against the alleged incompetence of general practitioners, but the complaint is ill-judged, and it will be groundless while medical men are asked to perform a duty for which they do not volunteer, and of which the majority would prefer to be relieved, and their honest endeavours to meet the requirement are rendered nugatory, because, instead of having their researches directed and their opinions elicited and tested by a competent tribunal, they are coerced into work they do not choose, and pressed to form opinions and make statements on oath in regard to matters with which they have no personal concern. All these evils would be avoided if the discovery and final determination of "the cause of death" were entrusted to a medical authority. This is the only practicable solution of the problem which has been forced upon us, and it is that which the common sense of the community must sooner or later adopt.

Annotations.

"Ne quid nimis."

THE UNIVERSITY OF LONDON.

THE questions in dispute between the Senate and Convocation of the University of London will, we trust, very shortly be satisfactorily settled. The Senate, at its meeting on Wednesday, Oct. 17th, agreed, after some discussion, to receive the message from Convocation which that body had, by a large majority, at its extraordinary meeting in July last, requested the Annual Committee to convey to the senators. It will be in the recollection of our readers, that Convocation, after voting that the Senate had morally infringed the rights of Convocation, and had acted contrary to the spirit of the charter, resolved to request the Senate not to proceed with Russell Gurney's Act, which they had adopted, and by which they empowered themselves to admit women to the University degrees in Medicine. The majority in favour of this resolution was decided in a house made up of all faculties, and in favour of it many graduates, well known inside and outside the University, belonging to faculties other than medical, recorded their votes. The whole tone and temper of the discussion at this extraordinary meeting were a credit to the University of London, and cannot fail to have impressed the senators who were present, and who, we trust, gave to other Fellows an account of the proceedings, and of the dignity which made the meeting worthy of remembrance in the annals of the University. The discussion from first to last showed that Convocation had right on its side, and even the amendment proposed on the main question, which was a vote of censure on the Senate, would, under other circumstances, have been regarded as amounting at least to disapproval of the proceedings of the Senate. The fact is that Convocation, made up of nearly three hundred graduates, voted unanimously against the Senate, but the graduates, because they disagreed on the women's question, could not agree as to the terms in which their condemnation should be put.

We understand that a sub-committee has been appointed by the Annual Committee to wait on the Senate, and that the latter body will receive it in November. This sub-committee has also, we hear, determined to submit in writing reasons explanatory of the recent doings of Convocation; and while, to a certain extent, we agree with this determination as a proof of courteous feelings towards the Senate, we do not think it any part or province of the Annual Committee or its sub-committee to discuss before the Senate the merits of the whole questions involved, even should the Senate, which is most unlikely, desire such unusual procedure. Convocation declared its opinion, and it rightly takes advantage of the existence of its Annual Committee to convey to the Senate that opinion. Arguments on the one side or the other are for the time at an end, and the simple question for the Senate is, after hearing the message of Convocation, shall or shall not the voice of Convocation be heard on subjects of such moment to the University? Of the answer to this question when put before the Senate we have no doubt. The governing body of the University will listen, we think, or we have greatly mistaken its general character. Men may think strongly, one way or the other, on the propriety of the admission of women to medical degrees; but for their university they must think more strongly still, and the Senate of the University of London will not, we are firmly persuaded, set itself in deliberate opposition to a gravely uttered decision of its most eminent graduates. Its history forbids us to think otherwise than that it will with dignity withdraw from its recent hasty action, and submit the whole question, should it deem that question ripe for immediate settlement, to a measured, calm, and all-round treatment. No one can regret more than we the great interruption in the harmony which has so long existed between the Senate and Convocation of the University, and we have at times, in consequence of our fear of disasters to the University, which has done so much for medical science, written strongly on the subject. We have felt bound generally to support Convocation, but have never failed to credit the Senate with the vast amount of good it has done in the advancement of medical education, and we may add in the advancement of the social status of the medical profession. We are not presumptuous enough to recommend a course of action to

the Senate, but we venture to write in the name of many medical men, and in the name of others not medical, both within and without the University of London, and are bound to say that we are convinced that the dignity and prestige of the senatorial body, and, therefore, of the University itself, must inevitably suffer in a material degree should the Senate refuse to listen to the decided votes of Convocation, and persevere in an independent line of action. Such issues all true lovers of the University would lament, and a large number of graduates await with increasing anxiety the decision to which the senatorial body may come.

COLLEGIATE PRIZES.

The following are the subjects of the essays for the prizes offered by the Royal College of Surgeons of England for competition amongst its members:—Of the Triennial Prize, "The Anatomy and Physiology of the Third, Fourth, and Sixth Nerves, as illustrated by Observation and Experiment in Health, and by reference to the Effects of Injury and Disease." Of the Jacksonian Prize for 1877, "The Disease of the Lymphatic System, known as Hodgkin's Disease or Lymphadenoma;" for 1878, "Glaucoma, its Causes, Symptoms, Pathology, and Treatment." It is curious to observe *en passant* how little interest the present generation appear to take in these matters, in comparison with those of an earlier period—such as Samuel Cooper, William Lawrence, Joseph Hodgson, Henry Earle, Edward Stanley, Joseph Swan, Richard Stafford, Blizard Curling, Thomas Callaway, John Birkett, the present President, &c., all of whom subsequently became Members of the Council and Board of Examiners, and six of them Presidents of the College. In a pecuniary point of view, they are not perhaps of high value, but such feelings did not influence the above and many other gentlemen from competing for them.

The Collegial Triennial Prize consists of the John Hunter Medal, executed in gold, to the value of fifty guineas, or, at the option of the successful author of the dissertation, of the said medal executed in bronze, with an honorarium of fifty pounds. It will scarcely be credited that no award has been made for this prize for nearly twenty years, and, curiously enough, the gentleman who then obtained it—viz., Mr. George Harley—is the only survivor since the establishment of the prize in 1822, when Mr. Joseph Swan carried it off, and again in 1825. During the following triennial periods no dissertations were sent in—viz., 1828, 1831, 1834, and 1837. This appears to have stimulated some gentlemen; for we find that in the next three periods it was won in 1840 by Mr. Thomas Williams, in 1843 by Mr. Holmes Coote, and in 1846 by Mr. Henry Gray, who was run so close in the contest by another candidate that the President, by permission of the Council, opened another sealed envelope, when the author was found to be Mr. Alfred Poland, who received a special honorarium. In 1849, 1852, and 1855, there was either no dissertation received or "no award"; in 1858, as already stated, an award was made, and none since. The essays for this prize must be sent in not later than the 31st December, 1879.

The Jacksonian Prize is represented, by the amount of the dividend, between £11 and £12, received from the Trust, which, thanks to Mr. Charles Hawkins, a gentleman who retired too soon from his seat in the Council, is increasing in value, as originally, and for many years, in fact since 1801, it remained at ten guineas. Here again the young members of the College appear to have very little ambition to become a Jacksonian Prize essayist, as, since 1866, when it was carried off by Mr. John Clay, to 1876, when Mr. Wm. H. Cripps won it, only three other gentlemen obtained it—viz., Messrs. Christopher Heath, W. Johnson Smith, and H. Trentham Butlin, all of whom are also Fellows of the College by examination, and Mr. Heath a member of the Board of Examiners. The present subjects are both practical, and, it is to be hoped, will find winners this and succeeding year amongst the Fellows and Members.

COMBINATION OF THE FREE AND THE PROVIDENT SYSTEMS IN DISPENSARIES.

After a long and intelligent discussion, the governors of the Plymouth Public Dispensary have unanimously resolved, "To give power to the committee to adopt the provident system in connexion with the institution," the institution being a free dispensary. There is a great deal to be said for the combination of the free and provident systems in one dispensary. In the first place there is the established plant, and all the advantages attaching to the local associations of a dispensary. Then there is an assurance in the very nature of such a combination that the peculiar nature of each class of case will be investigated. The poor will be provided for gratuitously, and those who are able to pay will be put in the way of providing for themselves. The provident system and its advantages will be explained to them. There is reason to believe that a large number of the patients who frequent free dispensaries do so rather from ignorance of the machinery and locality of the Provident Dispensary than from any wish to be gratuitously treated. The whole result of this scheme at Plymouth is to leave the question in the hands of the committee. The actual adoption of the principle and all the details are left to be determined by it. It is not yet ascertained whether the committee for such a change would require the consent of the Charity Commissioners. It is not expected that the funds of the dispensary will be touched. It is even thought that they may be so saved by this change that a convalescent home may be provided with the surplus funds. We hope the committee will endeavour to secure two objects. First, that no respectable sick person shall be neglected who is incapable of paying the fees required by the provident system; secondly, that the remuneration to be given to the medical men under the provident system be really such as to compensate them for giving time and interest to the work. Plymouth has already a Provident Dispensary. It is said to have the great distinction of being the only one that is self-supporting in the country. Yet it is described as "a struggling" institution. If these Provident Dispensaries are really to be a success and to excite the interest of the medical profession, they must be worked a little more generously in respect of medical remuneration than they have hitherto been. We shall look forward with much interest to the progress of this question in Plymouth.

CHOLERA FROM THE LAUNDRY.

Incidents, confirming the belief that diseases are spread by laundries are constantly reported to us as occurring, not only in England, but also on the continent, and our efforts at reform in this respect have been generally approved abroad as well as at home. Dr. H. Lebert, corresponding member of the French Institute, and recently Professor of the Breslau University, has informed us of several cases which, occurring under his own observations, further illustrate the dangers we have attempted to describe. The last epidemic of cholera which afflicted the inhabitants of Zurich was, it appears, traced to a washerwoman. Without hesitating, and without employing any special precaution, this woman washed the linen belonging to a child who had been ill with cholera, and, as

the penalty of her imprudence, contracted the disease, and died from it. The germs thus sown in the laundry were soon propagated, first to the inhabitants of the street, to the washerwoman's immediate neighbours and customers, the scourge afterwards spreading all over the town. Previously there had been no case whatsoever of cholera. It attacked first the child, and was then spread throughout the town by the washerwoman. At Branson, near Martigny, in French Switzerland, Dr. Lebert was acquainted with a sister of charity, who took excellent care of some persons suffering from cholera. When the epidemic was over, the sister devoted herself to washing the linen of her patients. She had escaped infection in the execution of her duties as a nurse, but fell ill after washing the clothes, and died. The loss of this valuable life was due, therefore, to the want of proper means of disinfection. Finally, Dr. Lebert relates that four washerwomen employed to cleanse the linen belonging to the Breslau Hospital contracted typhoid fever. These women lived in different quarters of the town, but they had all washed linen taken from typhoid patients; thus it is probable that they were also victims of the carelessness so universally displayed when dealing with soiled linen. It is very unlikely that four washerwomen, each living in different parts of the town, would all have simultaneously fallen ill with the same disease, but for the fact that they were brought into personal and prolonged contact with what would appear to have been contaminated clothing.

SENSATIONAL INFANT MORTALITY STATISTICS.

PUBLIC hygiene suffers much from the inability of the public, and even of that portion of the public which should be better informed, to weigh the value of figures as the exponents of sanitary conditions. Unfortunately, many of the most important facts relating to the public health can only be expressed in figures, and the appreciation of figures necessitates some standard for comparison, or some previous definite knowledge of the subject. Even as regards infant mortality, it is simply astonishing to find how much ignorance prevails as to its variations, actual and probable, under different conditions. With reference to this subject, a startling announcement has been going the round of our lay contemporaries to the effect that the medical officer of health of Wednesbury had recently reported to his sanitary authority that, after careful analysis of the mortality statistics of his district during the last six years, he had found that more than 53 per cent. of the deaths were of infants aged less than one month! The slightest knowledge of the subject would inevitably induce disbelief of such a startling statement; but while the statement has served as a peg to hang several perorations against the enormities of infanticide at home and abroad, at Timbuctoo and in the Black Country, it does not appear to have suggested itself to any of the various editors who have reproduced and commented on the statement that it might be a blunder. We do not presume to know how the blunder may have originated, or who is responsible for it; the impossibility of its being true, however, is patent enough to anyone who realises what the statement implies. It is a well-known fact that in all populations the deaths of infants aged between one month and twelve months exceed those of infants aged less than one month. It would follow, therefore, that during the past six years all the deaths within the Local Board District of Wednesbury must have been of infants aged less than one year, while the whole population over that age must have enjoyed a complete immunity from death! The facts of the case are that during these six years, of 3439 deaths at all ages in Wednesbury, only 1104, or 32 per cent., were of infants under one year of age. No one conversant with the preparation of trustworthy vital statistics would now attempt to measure infant mortality by its proportion to the mortality at all ages. The most simple and at the same time the most satisfactory standard for measuring infant mortality is the proportion of deaths under one year to births. It appears that infant mortality in Wednesbury, measured by this standard, averaged 168 per 1000 during the six years under notice, which was 8 per 1000 below the average rate of infant mortality in twenty of the largest English towns during the same period. Not only is there evidently nothing sensationally excessive in the rate of infant mortality in Wednesbury, but we are able to assure the Local Board that the rate has steadily declined during the six past years from 181 per 1000 in 1871-2 to 156 in 1875-6. The rate of infant mortality in Wednesbury is undoubtedly excessive, as it is in most other parts of the Black Country, but its reduction will not be assisted by such blundering and exaggerated statements as those which have recently been published so extensively.

SPECTROSCOPIC RESEARCHES ON THE BLOOD.

IN an original communication made to the *Centralblatt* Drs. Leuder and Bäblich state that, from repeated examinations, they find the spectrum of the blood within the vessels of a living rabbit to be identical with that of blood recently removed from the bloodvessels. Short contact of the blood with the air does not alter the position of the two usual absorption-strim between D and E. The spectrum of blood poisoned with hydrocyanic acid corresponds with that in which there is a great diminution of oxyhæmoglobin, and is characterised by a much feebler second band and a considerable darkening of the space between the two strim. The spectrum of the blood of patients narcotised with pure nitrous oxide showed a slight diminution in the amount of oxygen, resembling that of the blood of a person suffering from extreme fatigue, and, after reduction, encroachment of absorption on the boundaries of the red and orange ($C_{12}D$) of methæmoglobin, which has been described by Vierordt as one of the products of the disintegration of oxyhæmoglobin. In patients narcotised by carbonic acid as well as by nitrous oxide—i.e., by breathing over and over again the same air—the action of the former gas is shown by the difficulty of effecting reduction in such a way as to make the two absorption strim behind D and before E coalesce. The presence of methæmoglobin in blood poisoned with nitrous oxide gas is demonstrable for at least an hour after the patient has wakened up from the narcosis, and when he feels quite recovered. How long it remains has not been ascertained. Leuder and Bäblich corroborate Vierordt's statement that the blood of one who is much fatigued contains a smaller quantity of oxyhæmoglobin than that of a man who has just been refreshed by sleep. Dr. Bäblich found that the amount of oxyhæmoglobin of his blood at half-past seven in the morning before breakfast, expressed in values of the extinction-coefficients of the second absorption band, to be 1·421; whilst at midnight, before going to bed, it was 1·238.

THE LINCOLN COUNTY HOSPITAL.

THE *Lincolnshire Chronicle*, October 12th, contains an account of the election of an honorary surgeon to the Lincoln County Hospital. There were three candidates for the post—Dr. G. M. Lowe, Mr. T. M. Wilkinson, and Mr. F. J. Mason. A rule states that an honorary surgeon must be either a Member or Fellow of the Royal College of Surgeons of England, Edinburgh, or Ireland. Only one of the candidates (Mr. Mason) possessed the necessary qualification, Dr. Lowe and Mr. Wilkinson holding only the licence of the

Edinburgh College of Surgeons. Immediately before the election Dr. Lowe sent in a letter withdrawing his candidature on the ground that he had received a legal opinion that he was excluded by the rule just referred to from holding the office of honorary surgeon. Upon this both Mr. Wilkinson and Mr. Mason were duly proposed and seconded. The question was then raised whether both or either of the gentlemen proposed was "a Fellow or Member of the Royal College of Surgeons of London, Edinburgh, or Dublin." This question was not fairly met. Mr. Wilkinson, who was elected, held *quoad* this appointment the same licences as Dr. Lowe, who had withdrawn from the contest in consequence of having been advised that he was disqualified by the rule. In spite of this Mr. Wilkinson was elected by a large majority. Without desiring in any way to question Mr. Wilkinson's fitness for the post to which he has been elected, we are at a loss to understand how this election was determined, especially as in former days the word licentiate stood in the rule after member, &c., but was struck out in consequence of the "years of grace." After Dr. Lowe had stated that he withdrew his candidature in consequence of the legal opinion he had received, the committee of the hospital might safely have postponed the election until their position was assured.

FOOTBALL.

THE football season has commenced, and to judge from the number of matches already reported, and the fixtures of others announced in the columns of the newspapers, the game has lost none of its popularity. We are glad, however, to learn that an increasing number of clubs have adopted the rules of the "Association Union." Our strictures on the game as played under the Rugby rules are, we hope, now beginning to bear fruit, and the players themselves are commencing to discuss for themselves the propriety of making some modifications in these rules, and rendering the game more one of football than of indiscriminate hauling, tearing, and scrimmaging,. On this point some excellent observations made in a series of papers on Football, now appearing in *Land and Water*, may be studied with advantage by captains and secretaries of clubs who are still considering what rules they will ultimately adopt. The original contention of THE LANCET was, first, that football, as played under the Rugby rules, was rendered considerably more dangerous than ought to be the case in so popular a game; and, secondly, that rules which gave such a decided advantage to strength and weight rendered the game unfair as a trial of skill. Now that the matter has been taken up by those possessing a thorough technical knowledge of the game, we hope to see it played in a more rational manner, and more like a game of skill than the mere bear fight into which it was rapidly degenerating.

SCARLET FEVER IN WOLVERHAMPTON.

IT is now more than twelve months since scarlet fever became fatally epidemic in the borough of Wolverhampton, and since the end of September, 1876, no less than 213 deaths have there been referred to this disease. Unless the disease has been of an unusually fatal type, which has not been reported to be the case, it may be safely estimated that during the year considerably more than two thousand persons within the borough have suffered from attacks of scarlet fever. During the last quarter of 1876 the fatal cases were 42; they declined to 24 in the first three months of this year; but rose successively to 33 and 88 in the following two quarters. The 88 fatal cases in the thirteen weeks ending 29th September showed an annual death-rate of 4·8 per 1000, and during the first three weeks of October 26 more fatal cases were recorded, equal to a still higher rate. The Town Council possesses no hospital accommodation for the isolation and treatment of infectious diseases, and have therefore been powerless to control the increasing prevalence of the disease. The high death-rate from the disease points to other sanitary shortcomings than the neglect to provide special hospital accommodation, and it is high time that some more energetic steps were taken, both to stay the still increasing fatality of scarlet fever, and to ascertain what are the insanitary conditions prevailing in the borough that caused so heavy a death-rate from the disease. It is worthy of note that so recently as 1873 scarlet fever was fatally epidemic in the town, and then caused no less than 124 deaths within the borough.

LORD JUSTICE AMPHLETT.

THE resignation of Lord Justice Amphlett, in consequence of ill-health resulting from a paralytic attack, has again suggested the idea that the health of our judges is sorely tried, not only by the arduous nature of their duties, but by the unusually foul atmosphere in which those duties have, as a rule, to be performed. We have heard it remarked by a very eminent advocate that when he has been engaged in any great case, the smell of the crowded court, reeking of humanity, was to him as the smell of battle to a war-horse, and afforded that stimulus which was necessary to let loose the bonds of his eloquence. The race, it is said, is not always to the strong; but, assuredly, at the bar the great prizes are only obtainable by those whose physical endurance is at least on a par with their mental power. We may take it for granted that those who reach the bench are always exceptionally strong men, and the great age to which our judges live is no less remarkable than the fact that occasionally one of their number succumbs apparently to the labour imposed upon him. The vital statistics of the legal profession would be interesting, and we should much like to know what are the prevailing diseases among men who lead a life of hurry and excitement, and inspire much more than their due allowance of carbonic acid gas, and how many in the race for fame are left behind exhausted on the course.

Most barristers belong to a class which is noted for its devotion to field-sports, and their early surroundings and subsequent training at the old universities both tend to keep alive that love of healthy exercise which enables them to make light of hygienic conditions which would quickly prove fatal to less robust constitutions. Every hunting-field contains a fair sprinkling of the bar; they largely recruit the ranks of oarsmen and cricketers; and the "Devil's Own" is noted as the most efficient of our volunteer regiments. The "survival of the fittest" is a law which is essential to the well-being of the animal creation, and assuredly there are no places where this law has fairer play than in the unwholesome dens in which justice is still administered pending the finishing of the new Law Courts.

TOWERING PARTRIDGES.

IN a communication to the *Field* of last week, Mr. Tegetmeier gives the results of post-mortem examinations of towering partridges, which may be briefly stated as follows: The birds in each case had been struck only by a single shot. In one instance the shot entered the body through the membrane which fills up the large notch in the breast bone; it then continued its course through the upper part of the liver, without injuring the heart or great vessels, into the left lung. There were no clots of blood in the body, but in the wounded lung some extravasation, and in the

windpipe and larger air-passages a considerable amount of blood. In the other bird, the single shot had completely severed the windpipe, which was full of coagula down to the lower extremity, where it divides into the two large bronchi, going to the right and left lungs. The head, neck, and rest of the body were uninjured, and the bird, in this instance, plainly died from suffocation. Mr. Tegetmeier also refers to a third case, where death evidently resulted from a similar lesion. We think the phenomenon of "towering" can be fully accounted for by these post-mortem appearances. The feeling of suffocation, induced by the hæmorrhage into the bronchi and air-vessels, causes the bird to make increased respiratory efforts by means of the wing muscles attached to the humerus and sternum, which, by their action, alternately depress and raise the expanded sternum like a great bellows, and then fill the air-cavities. The increased action of the wings causes the bird to rise, till its power of drawing in air is exhausted and its buoyancy destroyed, when it falls like a plummet to the ground.

ENTRANCE SYSTEM AT THE PUBLIC SCHOOLS.

THE popularity of our chief public schools renders admission to them as difficult as entrance to a first-rate London club, and parents are obliged to enter their sons' names years beforehand if they wish to have them educated at Eton, Winchester, or Harrow. We think this plan of putting down a boy's name years beforehand an unfair one, and disadvantageous to the schools themselves. It is unfair, because it practically excludes a large number of boys whose parents have either been ignorant of the necessity of placing their sons' names early enough on the list, or from circumstances have felt unwilling to do so till their own position was more assured. Hence the opportunity for education at these schools is becoming more and more the privilege of the wealthy classes. It is disadvantageous to the schools, because it swamps them with a number of boys who have no ambition in life, and consequently little need for intellectual exertion; whilst, having almost an unbounded command of money, luxurious habits are fostered, to the great detriment of the boy in after-life. We should be glad to see a serious attempt made to cut down the unnecessary and growing expenses at these our chief public schools; and we think it would be advisable to change the present entrance system for one of selection by examination; the schools would get better material to deal with, and a lad with brains would not feel that injustice had been done him by his exclusion simply because his father had not made his fortune in time enough to justify him in entering his name.

"FIRE-DAMP" IN MINES.

THE recent terrible explosion at High Blantyre, by which more than two hundred lives have been sacrificed, again painfully revives the subject of "Fire-damp in Mines." It must be assumed, remembering all the measures which have been taken to prevent "accidents" of this class, that the perils to which miners are exposed, especially in old pits, is unavoidable. The risk might be further minimised if the regulations laid down by authority and strict discipline could be enforced; but no security can be obtained. That being so, would it be impossible to devise means by which the actual state of the atmosphere in any part of the workings should be indicated at the pit's mouth, and the whole management placed under central control? It generally happens that an explosion takes place at the instant of establishing some communication with a disused chamber or heading. If it were possible to place the actual condition of the contained air in the several chambers under constant observation, the precise location of the fire-damp would be known, and either measures could be taken to draw off the gas or the dangerous quarter could be avoided. We doubt whether attention has been directed to the more practicable phases of this great difficulty.

A DEARTH OF DOCTORS.

RUSSIA has long suffered from a scarcity of properly educated medical men. It is owing to this scarcity that the question of training women in medicine has assumed an importance in Russia which it has not acquired elsewhere This scarcity, it is reported, is now aggravated to positive dearth, in consequence of the large numbers of medical men in civil practice who have volunteered their aid to the armies of Bulgaria and the Caucasus, particularly under the Red Cross. Each of the medical schools has been largely denuded of its professors from the same cause. Thus it has come to pass that in many localities the number of medical men has been so much diminished that serious difficulty is being experienced therefrom by the civil population. The autumn has proved a sickly season from a prevalence of children's epidemics, especially of scarlet fever; and it has been asserted (we cannot but think on insufficient ground) that there have been serious extensions of infectious sickness among the civil population from soldiers suffering from such sickness transported from Bulgaria into the interior. Some of the medical professors are now returning to their homes, but the mass of medical volunteers in Bulgaria and the Caucasus will be needed there until the close of the war. Not the least considerable sacrifice which a large portion of the civil population of Russia will have to make during the war will be the loss of its medical men.

A GOOD EXAMPLE.

IN trivial matters the public in general are very apt to slavishly copy the leaders of society, and we cannot but hope that the example set by the Prince and Princess of Wales in sending their sons to receive physical training and technical and general education on board the *Britannia* will be as extensively followed as some of the other fashions which have emanated from our Royal leaders. Nothing is more calculated to strengthen the physical and moral nature of a lad than life on board ship, where he will find fresh air, simplicity and regularity of living, manly duties to perform, and discipline. We should like to see, in a great naval country like this, a considerable extension of the school-ship system. Many a parent would be glad of the opportunity of sending his sons for a time to such an institution. Our great public schools are getting too expensive and too luxurious, and they are quite as likely to mar as to make the characters of those who go to them. On board ship there is not much scope for the mischievous influences of excess of pocket-money, and the wearing of a uniform prevents that extravagant excess in dress into which our school-boys are so prone to run. The size of a cadet's sea-chest also does not permit much luxury in the way of a wardrobe, and the being slung in a hammock is well calculated to make a boy forget any effeminate ways in which he may have been brought up. At present, in addition to the *Britannia*, we have only the ships for the rescued street Arabs, the great value of which nobody can doubt, and the *Conway*, the school-frigate of the Mercantile Marine Association. The *Conway* was instituted merely for the education of boys intended for the merchant service, and it has received that encouragement which it deserves from her Majesty and from the Lords of the Admiralty. Boys

are received between the ages of thirteen and sixteen, and at a cost of forty guineas per annum. This ship is commanded by Captain Bond Franklin, a naval officer of distinction, who is assisted by a staff of masters. We should like to see many more *Conways* established.

COMMISSION ON ROYAL RESIDENCES.

WE have not yet heard what steps are to be taken with a view to ascertain the real sanitary condition of the royal residences. The danger is not of a nature to be disregarded, and delays are proverbially unsafe. It is impossible to accept the explanation offered of certain recent illnesses. There is grave mischief at work somewhere, and we have no hesitation in repeating the earnest counsel that a thorough investigation should be made by competent experts into the drainage, water supply, and general sanitary arrangements—old and new, or renovated—of Marlborough House. The inquiry must not end there; other of the establishments tenanted by members of the Royal family or the households sorely need to be overhauled. There has, we fear, been a great deal too much patching and mending, instead of entire reconstruction, and some possible nests of disease have been buried out of sight rather than destroyed. It will be useless again to call in the aid of physicians, however distinguished. The task which waits to be accomplished is one for experts in sanitary apparatus, and their assistance should be at once secured.

PORT SANITARY WORK.

THE annual report of Dr. Henry J. Yeld, health officer to the Port Sanitary Authority of Sunderland, shows that the importance of keeping floating as well as fixed habitations in decent sanitary condition is being understood and appreciated. A total of 2069 vessels were visited in that port during the year ending Sept. 29th, 653 of which were steamships and 1416 sailing ships; and of these, 1060 were found in good sanitary condition, 390 in what the medical officer calls fair sanitary condition, and 619 were found in an unsanitary condition. These last resulted in the series of 506 notices to abate nuisances, 394 of which were complied with, and in 112 cases the results have not yet been ascertained, because the vessels in question have left the port. The question of erecting a hospital for contagious diseases near the beach has engaged the attention of the authority, and negotiations are now being carried on with the Local Government Board as to borrowing the money required; and it is anticipated that this hospital will be erected during the next year, and ready for the reception of patients.

GALE'S NEW TASK.

WILLIAM GALE, the Welsh pedestrian, who recently accomplished the feat of walking 1500 miles in 1000 hours, last Sunday morning, at twenty minutes past four, started in the Agricultural Hall on a fresh exploit—viz., to walk 4000 quarter miles in 4000 consecutive periods of ten minutes. It is stated that Gale has successfully accomplished this task at Cardiff, but as some doubt has been thrown on the time, on the present occasion pains will be taken to verify it by having two judges constantly in attendance on him whilst on the track. Should he succeed, he will have performed an unparalleled feat of human endurance and pluck. There are several interesting questions connected with this trial. How will the system stand such a prolonged withdrawal of rest and sleep? What will be the effect on the varicose veins from which he is said to be suffering? and how will the arterial tension throughout the body be affected by this excessive strain?

THERAPEUTIC ACTION OF BALSAM OF PERU.

DR. E. WISS, at a late meeting of the Medical Society of Berlin, called attention to the long-known, but lately somewhat neglected, value of the balsam of Peru in wounds, and in some other affections. He states that in all cases of cuts and lacerations, if the balsam be applied to the part injured, a momentary smart is felt, which is immediately followed by relief of the pain previously experienced, and the wound will be found to heal up with great rapidity, without suppuration, or indeed any signs of inflammation. The power of the balsam to prevent suppuration led him to employ it in chronic catarrh, as had been long ago recommended by various authors, and he mentions several cases in which the administration of it in the form of an emulsion with the yelk of egg, in the proportion of four parts of balsam to 120 of yelk, a teaspoonful being given every second hour, proved of the greatest service.

SOLDIERS' BREAD.

GREAT complaints, it appears, have been lately made concerning the quality of the bread ration supplied to our soldiers. The quantity, a daily allowance of one pound, is generally thought to be sufficient, but there is a strong feeling that the commissariat should prepare a loaf richer in flesh-forming elements than the present white one on which the troops subsist. We believe we are right in stating that this question at present occupies the attention of the heads of the War Office. The larger quantities of gluten and mineral matter which bran contains as compared with flour, and altogether its superior nutritive force, would seem to point out the adaptability of pure brown bread to the new requirements of the soldier. The only objection which could be urged against it would scarcely, we fancy, apply to the case of soldiers, whose digestive functions are sufficiently strong to assimilate and thrive on what would perhaps prove too strong for more delicate stomachs.

VACCINATION.

A HOUSE-TO-HOUSE and school visitation has recently been made in the parish of Kensington by Mr. Shattock, the vaccination officer. According to the *Metropolitan*, 270 streets have been canvassed, including 7996 inhabited houses, occupied by 21,000 separate families. In these houses 290 unvaccinated children were found; and an examination of nine schools, containing 2089 children, showed 60 unvaccinated. Of the total 350 unvaccinated children, 303 have now been successfully vaccinated, 13 were at the date of the report undergoing the operation, 27 were certified as unfit from ill-health, and 3 have gone out of the district; leaving 4 out of the total number unaccounted for.

THE ARTISANS' DWELLINGS ACT.

MR. JOHN LIDDLE, medical officer of health for Whitechapel, has recently presented a report to the local authorities as to the unhealthiness of another area in his district. This area is estimated at 19,886 superficial yards, with a population of 2307 persons, who are housed in courts and alleys of a superlatively wretched description. The area gives to each person an average of about eight and a half yards. This is the fifth scheme presented by Mr. Liddle, three of which have been already approved by the Home Secretary.

THE Bethnal-green Board of Guardians have, with the sanction of the Local Government Board, determined to appoint two resident medical officers for their workhouse, at salaries of £200 and £150 per annum respectively.

THE registration of gentlemen pursuing their professional studies at the metropolitan hospitals is now closed, and the total amounts to the large number of 1919, including 82 dental students. This is a larger number than any year, except 1872, since the establishment of the registration, which we hope will now be discontinued, judging from the favourable manner in which a notice of motion to that effect was received at the last meeting of the Council of the Royal College of Surgeons. Since our last issue we have been informed that 11 first year and 15 other students have entered the Sheffield School of Medicine. At St. Mary's Hospital, London, there were 25 first year students and 8 others.

THE ceremony of formally opening a Convalescent Home in the vicinity of Belfast was performed last week by Sir Richard Wallace, Bart., M.P. The institution can accommodate about thirty patients, and has been established in connexion with the Belfast Royal Hospital, which was founded in 1790 under the name of the Belfast Charitable Infirmary. We are confident that the "Home," the first of its kind which has been established in the North of Ireland, will be an important aid to the various charitable institutions which Belfast possesses.

A CORRESPONDENT of a provincial contemporary opportunely calls attention to the fact that, although the Canal Boats Act comes into operation next January, nothing whatever has been done in the way of serving notices at the principal places along the canals, nor is any information relating to the Act procurable. The measure is so comprehensive and important that it is more than time for taking steps to acquaint those interested with the scope of its operation.

THE Hexham rural sanitary authority have countersigned a letter addressed by Dr. Maclagan, their medical officer, to the Local Government Board, requesting the aid of the Board in making it compulsory in medical men and householders to give immediate information to medical officers of health of the occurrence of infectious disease in their practice or within their households.

MR. BIANCHI, medical officer of health for St. Saviour's, Southwark, reports that many houses in his district are unfit for human habitation, and has on several occasions drawn the attention of his Board to the subject. The authorities of this parish are about to appoint a medical officer for their new infirmary, at a salary of £400 a year.

THE members of the Royal College of Surgeons will be pleased to learn that the Council have agreed to allow to Mr. Stone the sum of £50 per annum, in consideration of his service in the College for the long period of forty-six years, and of the extra expense which he has incurred by being no longer resident in the College.

THE Court of Quarter Sessions for Wiltshire have decided not to appoint a public analyst, as "no sufficient evidence has reached the court that the inhabitants required the appointment of such an officer, and that the Food and Drugs Act of 1875 provided, as far as the county of Wilts was concerned, sufficient protection to the public."

BERMONDSEY appears to be suffering from a scarcity of water, the district being supplied by the Vauxhall Water Company, who have, it seems, but one main for the entire district, which main has recently burst.

MR. BRUDENELL CARTER has resigned the surgeoncy to the Royal South London Ophthalmic Hospital.

THE local committee and staff of the Woolwich district of the St. John Ambulance Association have just been appointed, and include, according to the *Naval and Military Gazette*, Dr. Prior Purvis, and Surgeons Maginn, M'Donough, Cuffe, Gunning, W. C. Robinson, Shepherd, and Staples, of the Herbert Hospital.

THE *Metropolitan* of Saturday last reports that small-pox has again appeared at Kensington, and Dr. Dudfield, medical officer of health for the district, records a group of five cases in one house, for information as to which he was indebted to the clergyman, not to the medical man in attendance.

WE are informed that a considerable quantity of adulterated or spurious morphia is at present in the drug market. Medical practitioners should therefore exercise caution in purchasing one of the most valuable preparations in the whole armoury of medicine.

THE Liverpool Town Council have at last matured a scheme for supplying the town with an abundant supply of good water from North Wales, at a cost of £1,250,000. The supply will be sufficient to provide for every requirement for many years to come.

DR. AQUILLA SMITH has been re-elected a member of the General Medical Council as representative of the King and Queen's College of Physicians in Ireland. Since the year 1866 Dr. Smith has been chosen as a member of the executive committee of the Council.

THE Harveian Oration for 1878, we are informed, will be delivered by Dr. Burdon-Sanderson.

MEDICAL STUDENTS.

THE statistical tables which were published last week, giving the number of new students who have entered at the metropolitan and provincial schools for the current session, afford matter alike for reflection and inquiry. With the important exception of University College, the returns from most of the metropolitan schools showed an increase in the number of first-year as well of older students. St. Bartholomew's takes a long lead with 150 new and 8 occasional students; Guy's stands second with 112 new and 3 occasional students; while University College this year makes rather a bad third with a total of 67, which are all classed as first year. If all the new entries be reckoned, St. Thomas's takes precedence of University College by six, and the London is within two of it. King's College, which had a considerable falling off last year, has had a satisfactory increase this year, although the total is far below what some had anticipated. There were a few persons who even imagined that in consequence of the recent changes in the professional staff, King's would stand foremost this year, and immediately before the actual commencement of the session the wildest and most unreasonable prognostications were hazarded concerning the prospective entries. Not unnaturally these hopes have not been realised, but the improvement which has taken place augurs well for the future prosperity of this school, the traditions and associations of which have always hitherto been, and will continue to be, identified with the distinguished surgical career and high renown of the late Sir William Fergusson.

What, it may be asked, determines the preference for particular schools? Such a question is more easily put than answered. All the circumstances which determine the selection of a school are, perhaps, but rarely precisely known or clearly defined. In many instances the personal influence

or recommendation of relatives or friends fix the choice. Sometimes mere accident or chance does it, but more commonly, perhaps, it is decided by the reputation, traditional or actual, of the surgeons and physicians, but especially the surgeons, who are, or have been, connected with the attached hospital, and by the consideration of the facilities which this hospital is supposed to afford for clinical study. More regard is paid to the size of the hospital, and the number of beds which are occupied, and to the professional standing of its medical and surgical staff, than to anything else. It has been observed that whenever a hospital has possessed a surgeon famed as an operator, it has always attracted, for a longer or shorter period, large numbers of students. It has been stated that no such allurement exists at present, for it is a common complaint of foreigners that there is not just now connected with any of the metropolitan hospitals a surgeon who can fairly be said to be distinguished as a brilliant and successful operator, or as a great surgical teacher. Many, doubtless, hold a respectable position, but none approach to the rank and standing occupied by Astley Cooper, the Bells, Liston, Guthrie, Brodie, Fergusson, and a few others of this and the preceding generation.

This table of new students was supplemented by a statement showing the total number of students at the Metropolitan during each academical year since the year 1850. Although care was taken to avoid every possible source of error, the conditions under which the figures had to be drawn up were so complicated, and some of them so conflicting, that we cannot pretend to have attained more than approximate accuracy. Any errors that may have crept in may, however, be regarded as unimportant, and for all practical purposes the return may be taken as tolerably correct.

The return shows that the number of students at the Metropolitan schools has gradually increased every decade of years, the mode of increase for the intermediate years having somewhat of a tidal character, being one year more, another year less. From 1850 to 1860 the variations were neither wide nor numerous, the numbers never exceeding 1100, nor falling much below 1000; but in 1860 a rush was made to escape the operation of the new regulations, and the number went up from 954 in 1859 to 1228 in 1860. After this they sank for a time, varying from a little below 1000 in the year 1864 to nearly 1200 in 1868. Since the year 1869 the increase has been more pronounced and regular. From 1298 in 1870 the number swelled to 1946 in 1872; then fell again to 1745 in 1874, and 1744 in 1876, rising to 1919 for this year (including 82 dental students).

These facts are sufficient to show that the number of medical students in the metropolis has greatly increased since 1850, and there are good reasons for believing that there has been a proportionate increase in most of the other schools throughout the United Kingdom. If a further addition be allowed for the large numbers who pass through a medical curriculum without registering at the Royal College of Surgeons (our statistics are mainly based upon the College returns), it may be fairly assumed that there has been a corresponding increase in the number of properly qualified medical practitioners. But, in spite of this, it is alleged by a very good authority that there is a dearth of medical practitioners, not only for the army and navy, but also for the general population, and that the proportion of medical practitioners to the general community has actually diminished.

In his address to the General Medical Council, in 1876, Dr. Acland called attention to the statistical statements of Dr. Farr, Dr. Burke, and Mr. Pitt Dundas respecting the proportion of medical practioners to the general population of England, Ireland, and Scotland. Dr. Farr, in the supplement to the Thirty-fifth Report of the Registrar-General stated that in the army there was one surgeon to every 202 men, in the general population 1 to every 1276. The proportion of medical men was, in 1851, 9·7 to every 10,000 living, 8·3 in 1861, and only 7·8 in 1871. In the army 40 per 10,000 are required. Dr. Burke's report showed that in Ireland the proportion of medical practitioners had increased from 4 to each 10,000 in 1851, to 5 per 10,000 in 1861, and 6 per 10,000 in 1871. In Scotland the number had diminished. Mr. Pitt Dundas stated that there were 7·2 per 10,000 in 1851, 6·1 per 10,000 in 1861, and 5·2 per 10,000 in 1871.

MEDICAL ASPECTS OF THE WAR.

THE preparations now being made by the Russian military authorities in view of a winter campaign are on a vast scale, and are being pushed forward with as much assiduity as is practicable under bureaucratic conditions so little conducive to efficiency and rapidity of action as those which obtain in Russian administration. Huge stores of corn, forage, and fuel are being accumulated at convenient spots in rear of the army; additional wooden hospitals are being erected on a large scale at Bouzourg, about twenty-five miles west of Giurgevo, and at Simnitza; and an order for 400,000 sheep-skin coats has been issued for execution in Russia. But side by side with this foresight is to be observed the most extraordinary want of prudence in keeping the principal routes of communication with the troops in the field in the most ordinary repair. The different roads from the right bank of the Danube have been suffered to get into a state of unrepair which reminds military observers of the condition of the route from Balaclava to the camps before Sebastopol during the earlier period of the Crimean war, and the supplies of some sections of the army have been seriously endangered thereby. On the other hand, it is to be noted that the new line of railway which is to connect the Roumanian lines with the left bank of the Danube at Simnitza is rapidly approaching completion, and we believe that ground has already been broken on the right bank for the formation of a line of rails from Sistova to the headquarters of the Russian army at Gorney-Studen.

We have before us a series of reports on the state of the Russian military hospitals in Roumania and Bulgaria, addressed to the principal inspector of the Russian sanitary service in the field, by the consulting physicians of the service—namely, Prof. Bergmann, of the University of Dorpat; Prof. Grube, of the University of Kharkov; Prof. Levschine, of the University of Kazan; and Prof. Sklifassoovski, of the Imperial Medico-Chirurgical Academy. In no instance during the inspections made by these gentlemen was there found any deficiency of the medical and surgical stores of the several hospitals; and at no time, even under the greatest pressure, had necessary surgical requirements been wanting. Thus, at the hospital at Toutchenitza, three thousand wounded were at one time received and dealt with in a period of twenty-four hours, without failure of stores, or the necessity of treating provisionally a single patient. It would appear, however, that the ability of dealing successfully with this vast mass of wounded within so short a time was very largely due to the fact of the excellent treatment the wounded had in the first instance received on the field, or in the field hospitals. There was not one of the 3000 wounded above referred to, Prof. Bergmann states, whose wounds had not been dressed before reaching the Toutchenitza hospital, thanks to the admirable organisation and work of the field ambulances.

According to an official return, there are now with the Russian army on the Danube 849 physicians, 3285 assistant-surgeons, 146 dispensers, and 123 veterinary surgeons; exclusive of the sanitary staff of the *corps de la garde*, the professors, the medical men attached to the Red-Cross Society, the hospital attendants, and the sisters of charity.

The *Messenger* of the Russian Red-Cross Society gives the

following facts relative to the finance of the Society. From December, 1876, to the 1st (13th) September, 1877, it received 3,861,624 roubles; of which 3,511,624 roubles were derived from donations, and 350,000 roubles were payments by the Minister of War for the maintenance of sick and wounded. On the 1st (13th) September the Society had a balance in hand of 1,411,998 roubles. Within the same period the local branches of the Society had received in donations 1,572,889 roubles. The total receipts of the Society from donations to the 1st (13th) September, 1877, had been 5,084,513 roubles. This sum was derived from the following sources:—Members of the Imperial family, 87,462 roubles; donations from Russia (1) of 10,000 roubles and upwards, 3,475,100, (2) under 10,000 roubles, 1,395,374, (3) from foreigners residing in Russia, 27,883; donations from abroad (1) from Russians resident abroad, 29,741; from foreigners, 68,953. The *Messenger* adds that during the war of 1870-71 the Germans contributed twenty-one million roubles in aid of the sick and wounded of their armies; and during the war of secession the Americans contributed 330 million roubles (220 millions of dollars).

A correspondent of the *Independence Belge*, writing from Trebizond under date the 3rd Oct., gives some interesting particulars as to the sanitary state of Turkish forces and military hospitals at Batoum and Trebizond. At Batoum he found the sanitary state of the troops going from bad to worse, and the hospitals, containing 1200 beds, overburdened with sick. At Trebizond he found the hospitals in a good sanitary condition. The patients there were suffering chiefly from dysentery. It was reported from Erzeroum, at the date above given, that there were no less than 6000 sick in the hospitals of that city; the greater number suffering from dysentery and typhus.

Recent news from Varna brings the news that Dr. Crookshank is passing favourably through the attack of typhoid from which he is suffering.

We have been favoured with the following letters from Mrs. Mawer, and from Mr. Fetherstonhaugh (the latter through the kindness of Lord Blantyre).

"Strada Coltzi, Bucharest, Oct. 3, 1877.

"I know that you like to hear of our movements, and you will be glad to know that we have at last been able to establish an English hospital on a small, though, I trust, an increasing scale. Government has given us a section of the Military School, which is partly a Roumanian hospital. Our section will be under Dr. Mawer's direction, aided by a native surgeon, until an English surgeon arrives. Several are expected (three, I believe); but the others will go to the front. Our agent and consul-general, Colonel Mansfield, takes great interest in the undertaking. Mrs. Mansfield, an energetic, capable lady, has superintendence, and helps in the wards as surgical nurse. To me belongs the control department, interpreter, and general utility business. The National Aid Society sent out Mr. Loyd with money and cases; he stayed here only a short time and then rushed off to the front. He left with Col. Mansfield cases of mutton broth, chicken ditto, Liebig, &c. (this latter we buy cheaper here than in England). Meat is 4d. per lb., and chickens 8d. each, therefore it is a waste of money in transport; added to which these tinned soups are not understood, and an unfortunate soldier had yesterday a lump of cold mutton broth (with the fat adhering to it) given to him as jelly! Mr. Loyd left no medical necessaries, neither chloroform nor quinine, so Dr. Mawer has to make himself personally responsible for these articles to the chemist. Mr. Loyd left shirts, drawers, &c., also some money; but Col. Mansfield says we must not use the money, as it is to be expended in sending surgeons to the front when they arrive. For all these cases which Mr. Loyd brought out as *personal luggage* he had to pay over £200 carriage, whereas all could have been bought as well and as cheap here. *Money* is what we want, and we are asking Sir Henry Havelock to telegraph to the National Aid Society to send us money. England will not understand that Roumania and Roumanian charities are perfectly distinct from Russia and Russian charities. At Turnu Magurelle the wounded are well cared for, and those who arrive here are even petted, and are all under the charge of different ladies. In the Princess's hospitals she is always present at every operation. The dietary of the hospital, of which we have a section, is as follows. At 7 A.M. milk and bread; at half-past 11, soup, chicken or meat, and wine; at 4 P.M. a small glass of rake (native spirit distilled from plums) and a piece of bread; supper at 7, soup and whatever more is required. I am sorry to say English sympathies do not go with us, for, notwithstanding all my appeals, scarcely any money has been sent; but now that there is a special object—i.e., an English hospital—I hope you in England will realise the necessity of the work. [P.S. Since writing my letter Mr. Loyd has returned to Bucharest, and has offered to give what medicines Dr. Mawer requires, and has left money with Col. Mansfield; we have now nothing to complain of.]"

Dr. Fetherstonhaugh to Lord Blantyre.

"Erzeroum, Sept. 19th, 1877.

"During the last fortnight we have got 112 new patients from the battles of the 18th and 25th August. The majority of the wounds are not severe. At present there are 175 patients under our care, and we have been told that twenty-five more are on their way to us. I have had two arm amputations lately; one died from tetanus after a few days, the other is doing fairly well. Six cases of stores arrived here from Stafford House Committee on Monday. Whenever I offer any stores to any of the doctors here the answer is always the same, 'We have everything.' Dr. Fluss wrote from Olti begging me to send on the stores which Ismail Bey refused horses for when Dr. Fluss was here. I will attend to it as soon as we can get horses.

"We had a fall of snow on the 8th; it lay on the mountains for some days, but has quite gone now, and the weather at present is beautifully fine. It is reported here that the Russian General has been reinforced by 22,000 men. If this is true we may expect a busy time, as they have still two months for fighting before winter stops them. Lieut. Dougal was in here this week, and says General Kemball is in capital health. I fear the Turks do not consider their wounded enough to think of removing them from here during the winter, which lasts about five months, and is generally very severe."

Dr. Featherstonhaugh to Lord Blantyre.

"Erzeroum, September 26th, 1877.

"Since I wrote last week we have had no new arrivals at our hospital; we have discharged about thirty, two of them had been operated on by me, having removed an arm from one and a great toe from the other; three have died; there remain in 141, vacancies 29. Accompanied by Mr. Young, special commissioner of the National Aid Society, I to-day visited the central hospital; they have very few wounded there now, but a good many sick, principally cases of ague, dysentery, and scurvy; they seem clean, comfortable, and, for war time, not overcrowded. One of the inspectors told me that, except in our hospital, there are few wounded in Erzeroum."

The British Consul writes (Erzeroum, September 26th)—"Nearly if not quite 300 wounded have been already discharged from our hospital cured. Higher praise I cannot give Drs. Casson and Fetherstonhaugh, who have laboured hard and earnestly, than by stating this gratifying fact. It should be borne in mind that to our hospital are sent all the badly wounded, not alone from recent actions, but those who have lain, almost uncared for, for months at the other hospitals."

The English hospital at Erzeroum was commenced on July 15th.

ROYAL COLLEGE OF SURGEONS.

THE quarterly meeting of the Council, held on Thursday, the 18th inst. (the first after the long vacation), was in many respects most important. Much discussion was given to the present condition of the Bristol Medical School. It appears that some of the staff of the Bristol Royal Infirmary had addressed a communication to the Council of the College asking them to hold an inquiry into the teaching of the Medical School. It is rumoured that the object was to have the School disfranchised. The Council of the College, after careful deliberation, agreed upon the following resolution:—

"That in consideration of the transitional state in which the Bristol School of Medicine has recently been, owing to

its proposed amalgamation with University College, Bristol, as set forth in the statement from the Faculty of the School, dated the 11th July last, it is not expedient that at present any action should be taken by the Council with a view to inspecting the School, in the manner suggested by the faculty of the Bristol Royal Infirmary, but that at the end of the present winter session the Faculty of the School be required to report upon the steps which have been taken by them to carry out the amalgamation with University College, Bristol, and on the materials and arrangements which the School shall then have for the effective instruction of students; that such report be accompanied by returns, showing the several courses of lectures which shall have been delivered in the school at this winter session, mentioning the date, duration, and subject-matter of each lecture, the number of students entered for each class, and the average attendance at each course; that such report further show what examinations have been held in each class, and by what average number of students the examinations of each class have been attended, what arrangements there are for superintendence, instruction, and examination in the dissecting-room, and what subjects have been received for dissection during the session, and how many students have taken part in dissecting them; and that such report and returns, when received, be submitted to the Council, in order that the Council may then determine whether or not to take further steps in the matter, and as to the future recognition or non-recognition of the Bristol School of Medicine."

On Monday last (the 22nd inst.) a meeting of the Conference of Representatives of the Medical Authorities engaged in the formation of a Conjoint Scheme for Examinations in England was held at the College. The Scheme of May 1st, 1877, having been accepted by the General Medical Council on May 24th, the Council of the College have been asked to appoint two members of the Committee of Reference. This the Council will do at their next meeting. As the choice which they will be called upon to make may affect the general progress of the scheme, it is desirable that those who may be selected should possess special knowledge of the subject of medical education. Perhaps no better names could be suggested than those of Sir James Paget and Mr. Simon.

While speaking of the meetings of the Council we should like to point out that the interest taken by the fellows and members in the College affairs would be greatly enhanced if a short summary of the Minutes were suspended in the hall of College. We believe that a standing rule exists to the effect that such a report shall be made, and placed in a position accessible to the fellows and members.

FLAX DISEASES.

A VALUABLE report has been recently compiled by Dr. C. D. Purdon, the certifying surgeon of the Belfast district, on the sanitary condition of the factory district of Belfast during ten years. According to that report 49,841 persons are engaged in flax manufacture in Great Britain. In Belfast, of this total number, there were employed in mills and factories in 1872, 32,000; on bleach greens 719, and in linen warerooms 1508, making a total of 34,227 persons. These numbers represent more than a third of all employed in the linen manufacture of Great Britain, and more than two-thirds of those that are engaged in Ireland. Most of our readers are probably aware that phthisis and other diseases of the respiratory organs affect workers in flax to a considerable extent, on account of the dust (technically called ponce) which is always floating in the air of the workshops. The statistics compiled by Dr. Purdon show that the average death-rate from phthisis has increased lately, notwithstanding the great improvements made in the sanitary arrangements of the mills. The great heat of the workrooms in the preparing departments is another evil, the average temperature being 73° F., increasing in the evening to 77° F. The "hacklers" are subjected to a temperature of from 65° to 68° F., but the dust causes a great and increasing amount of disease. The spinners suffer less from phthisis than other classes of workers, but are much influenced by the moisture and heat of the rooms, which often cause fainting, accidents having occurred by the operatives falling when in this state on the machinery. The temperature in these rooms sometimes reaches 82° F., and the garments of the workers are so constantly wetted by spray from the spindles, that they go out into the open air with saturated clothes, and are, of course, frequent victims to bronchitis. Doffers are subjected to the same evils as spinners, and the weavers suffer greatly from chest affections by inhaling the damp air, which has an average temperature of 75° F.; many of the workers in this department being under eighteen years of age, and, being obliged to stoop constantly at the looms, get contracted chests; and this, with other circumstances, make the death-rate very high. The winding rooms are well ventilated, and have an average temperature of from 70° to 73°; the rolling rooms are also totally free from dust; but the rooms in which the dressing of the flax is carried on require to be kept at a temperature varying from 90° to 125°. No one under eighteen years old is employed in these rooms, and, as it is considered that their lives are shortened several years, they are paid very high wages. Dr. Purdon reports that the great mortality from chest affections in certain departments of flax manufacture is caused "chiefly by the unhealthiness of the employment, commencing to work in unhealthy departments at too early an age, in being employed at work that is unsuited to their physical capacity (either through age or physical development), neglect of sanitary laws, insufficient or improper diet, unhealthy parentage, and insufficient clothing. The suggestions urged towards mitigating the mortality that occurs amongst the mill workers, from various causes, are: 1. That no half-timers be employed in unhealthy processes, and that those who are employed should be at least fifteen years of age, healthy and well developed. 2. That no one under eighteen should get a card, or obtain two looms. 3. A thorough system of ventilation or other means be carried out in the rooms in which the preparing is carried on. 4. Inspection of children and young persons at stated intervals, to see if health is injured by employment, and if suffering from incipient disease or severity of the work, obliged to cease working in that department; and that there should be a fresh examination at each engagement. 5. That they should be examined to see if they were efficiently vaccinated. The wearing of the 'Baker respirator' to be compulsory. Temperature to be kept at 70° F., by ventilation. The schools of the half-timers to be well looked after. 6. Soup-kitchens to be established where the worker could obtain, at a small cost, good and wholesome food."

This valuable report contains many other interesting particulars well worthy the attention of all factory surgeons. An analysis of the fibre of flax by Professor Hodges shows that a hundred parts of the web of flax-straw contained 20·32 parts of potash, 2·7 of soda, 9·27 of chloride of sodium, 19·88 of lime, 4·05 of magnesia, 2·83 of oxide of iron, 7·13 of sulphuric acid, 10·24 of phosphoric acid, 10·72 of carbonic acid, and 12·80 of silica.

HEALTH OF DUBLIN. — During the September quarter the births registered in Dublin numbered 2245, being equal to 28·5 in every 1000 of the population; and the deaths 1757, or 22·3 per 1000. Zymotic diseases caused a mortality of 342, being nearly one-fourth less than the average for the corresponding quarter of the past ten years. The principal causes of death were as follows:—Phthisis caused 213 deaths; bonchitis 176; convulsions 143; measles 122; heart disease 93; fever 54; pneumonia 47; mesenteric disease 40; paralysis 31; cancer 29; croup 22; whooping-cough 20; scarlatina 18; whilst 55 violent deaths were registered; of these 52 resulted from accidents or negligence, 2 were cases of suicide, and in the remaining instance the return was too vague to admit of classification.

Correspondence.

"Audi alteram partem."

THE MEDICAL ASPECTS OF TOTAL ABSTINENCE.

To the Editor of THE LANCET.

SIR,—The letter of your correspondent "In Medio," together with other utterances of the same kind which have lately appeared in your columns, induce me to think that the present time is not an unsuitable one for endeavouring to place the question of the dietetic use of alcohol upon a sound basis of medical knowledge and experience. The personal habits of the majority of physicians and surgeons, as well as the advice which they often give to their patients, lead to the belief that they regard alcoholic drinks as valuable articles of diet; but there seems, nevertheless, to be an unwillingness boldly to traverse the doctrines of the advocates of total abstinence; and a tendency to keep silence before their arguments, even on the part of those who are not in the slightest degree convinced by them. With your permission, Sir, I will deliver my own mind by a brief statement of my personal experience, offered as a small contribution towards the attainment of the truth.

At three different periods of my professional life, in the spring of 1857, in the autumn of 1862, and in the spring of the present year, I have fairly tried the experiment of total abstinence. I may say that I am a small—of late years, I think, an unusually small—eater; and that it has been my constant habit to occupy my brain actively, both within and beyond the work of my calling.

In 1857, I was practising in a mining district where drunkenness prevailed, and where I led a very active life, going long distances every day on foot or on horseback. I was accustomed to drink bitter beer with my early dinner and with my supper; probably a glass and a half or two glasses, with each meal, and I was in perfect health. I wished to be able to say to the drinking men who came under my care that beer was not necessary for them, and to say this from the vantage ground of the position "Nobody works harder than I, and I never touch it." I laid it aside entirely for about two months, and then my health began to give way. My tongue became furred, my palate disordered, my urine threw down a copious deposit, and I felt weary and languid. I considered that the waste of my body was in excess of the repair, and I had no inclination to carry the experiment too far. I returned to my bitter beer, and in a week was as well as ever.

In 1862, having just removed into an agricultural district, where all the circumstances and surroundings of my life were exceptionally favourable to health, I mentioned my experiment to a well-known advocate of total abstinence. He said the result would have been different if I had taken strong coffee as a substitute for the alcohol to which I had become accustomed. I determined to try again, and I took a cup of black coffee every day after dinner. On this second occasion I was able to go on longer, speaking from memory I think nearly four months, and then the old symptoms returned in a manner so decided that I immediately resumed my moderate potations, and was once more rapidly restored to health.

Fourteen years having passed away, and the surroundings of my life having changed totally, I determined to try again. In the meanwhile, the physical work of a country doctor had been abandoned for the comparatively sedentary habits of a London specialist; and beer had been given up as tending to produce acid indigestion. Under the guidance of experience, and by the kind advice of a wise physician, I was taking wine only occasionally, and then in small quantity; and my daily drink with meals was very weak whisky-and-water, the spirit not being any of the villanous varieties of varnish which are puffed and advertised under the name of whisky, but the genuine article, as it is made in the great Dublin distilleries, well matured by keeping. The quantity was about an ounce of absolute alcohol daily. I discontinued even this small quantity; and for a week or two I was, or fancied myself, better for the change. Soon, however, a new condition declared itself, for I became so drowsy that I could not get through an afternoon of sedentary work. If I had nothing to take me out after luncheon, I fell asleep over a book in my study. Physiologists say, I believe, that the action of alcohol is to dilate the capillaries; and, perhaps, the capillaries of my brain may require dilatation as a condition of affording a sufficient blood supply for the maintenance of healthy activity. I cannot tell how this may be, and I am content to state the fact, and to leave others to explain it. I returned to my ten-water grog, and the drowsiness was at once dispelled. As far as I can foresee, I shall not be tempted to institute any more experiments in the same direction.

In 1867, before I relinquished general practice, I attended a gentleman seventy years of age, who became unable, from sickness if I remember rightly, to take any solid food. He was supported entirely by alcoholic drinks, and after a time he improved to such an extent as to be able to leave his bedroom and come down stairs. For a period of about six months he took no solid food, and was kept in moderate strength and comfort upon alcoholic drinks alone. He liked variety, and he rung the changes upon champagne, old port, brandy, the strongest Burton beer, and other liquids. In some of them, of course, there was a certain amount of saccharine matter, but not enough to maintain life as he maintained it. When I came to reside in London, this patient passed from under my direct observation, but I was informed that he lived for some time longer in the same manner, without any remarkable emaciation, and strong enough, when he did not leave his bed, to sit up in it to receive visits from his friends. He was very bright and intelligent throughout his illness; and he practically lived for many months, with little change one way or the other, upon alcohol and water only. This case does not stand alone in my experience, but it is the most remarkable of its class that I have seen.

While I fully admit, therefore, that there are many people who can support life without alcohol, I affirm from my personal experience that there are some, I know not how many, to whom alcohol is a necessity. I strongly suspect, from the writings and speeches of many total abstainers, that even in cases where abstinence appears to be successful, the nutrition of the centres, which are subservient to the higher operations of the mind, is less perfect than it might be; and I think it very possible that I might myself exist without alcohol, if I could be content to let my brain lie fallow, and to limit my vital activity to a moderate amount of physical exertion. Again, when I am told, as a result of laboratory work, that alcohol is not food, I reply that the statement is a mistake. I care nothing for the laboratory work, which is exposed to countless sources of error, and I have seen life maintained upon alcohol for months together. Although a chemist cannot tell me how the effect is produced, I shall not reject the evidence of my senses because his knowledge of the process of nutrition is incomplete. I believe what I have seen and felt, and I tell the chemist that he has blundered. It is his business to find out the how and the where.

To come to a weaker ground of argument, I believe that in healthy persons the tastes are, generally speaking, "expressions of the wants of the system," and, if this be true, the immediate gratification of the palate, and the speedy comfort to the nervous system, which are afforded by drinking, say a glass of fine old Burgundy, speak very loudly in favour, at least, of its occasional use.

To make the record of my personal experience complete, I ought to say that I cannot beneficially take more than the ounce of alcohol of which I have spoken. A larger quantity—as, for example, an admixture of various wines at dinner—always produces symptoms of discomfort; and these symptoms depend, as far as I can make out, upon an increased demand for water to assist in disposing of the superfluous spirit. While, therefore, for myself and for my present mode of life, I regard alcohol as a necessary, I fully admit that the quantity required is small, and that any excess is hurtful. Of excess which would be universally recognised as such it is not needful for me to speak. I think that many of the consequences which are with some plausibility attributed to drink should really be attributed to a deeper cause—the absence of self-control; but the evils of drunkenness are sufficiently appalling, even if we reduce them within the narrowest limits. However great these

evils, we still must not forget that, in morals as in science, truth is essential to safe and useful progress. It appears to me that the customary statements of total abstainers are to a large extent inaccurate, and that their arguments are in a great degree fallacious. I do not believe that inaccurate statements and fallacious arguments are weapons with which any good can be effected, and I hope I may succeed in obtaining from others such records of their own experience as may show how far the opinions which I have ventured to express can be justified and borne out by facts.

I am, Sir, your obedient servant,

Wimpole-street, October 23rd, 1877. R. BRUDENELL CARTER.

FEVER IN JAMAICA.

To the Editor of THE LANCET.

SIR,—Your paper of the 13th inst. contains a letter from Dr. Cole on the above subject. I quite agree with him that injurious aspersions have been cast on the members of the profession practising in Jamaica. I have spent some years there, and can speak from personal experience of the ability and skill of the members of the Government medical service. The last mail brought me a letter from one of the ablest of these gentlemen, Dr. Jasper Cargill, under whose care most of the cases were, and who was the personal medical attendant of the late governor. He writes as follows:—

"I may briefly touch on the topic uppermost in the minds of all here, the deaths from yellow fever. On July 27th I received a note from the Lieutenant-Governor requesting me to go to General Mann's mountain residence, near Newcastle, to see his stepson, Mr. Crichton, lately arrived from England. I found the young gentleman suffering from yellow fever in its worst form. Dr. Steventon met me in consultation that evening, and we both agreed that recovery was impossible. He died on the 29th. In the meantime Miss Rushworth, who had gone on a visit to Mr. McDowell's at Clifton Mount, got the disease. Black vomit came on very quickly, and she died on the 30th. The Lieutenant-Governor removed to a house near Halfway Tree. On August 5th he was seized with yellow fever. I was sent for at once, and was soon after joined by Dr. Steventon. We both considered the Lieutenant-Governor a very bad subject for yellow fever, and, in addition, he was much cast down by his sudden grief. We remained with him day and night, feeding him with the greatest care, but the type of disease was as bad as it could be. Both liver and kidneys ceased to act, and he died from suppression of urine on August 9th. General Mann was sworn in as Administrator on August 18th, and the same day he was attacked with the fever. He came at once to me for treatment. By next day Mrs. and Miss Mann were both down with yellow fever. I found that a shirt of Mr. Crichton's had been laid by in a wardrobe, and this, no doubt, was the means of infecting the family of the General. Again Dr. Steventon assisted me in consultation. After a fortnight's hard work they all recovered, which was a happy result. The nurses and servants, five in number, all got a fever of a remittent type. The Rev. Mr. Brookes, who visited the sufferers, had a mild attack of yellow fever. Mrs. Brookes, who was constantly with them, was attacked on August 21st with a very severe form of the disease. I was with her night and day, and, I am happy to say, she recovered. While this was going on in the Hills there were a few cases of yellow fever among the merchant sailors in the hospital, but nothing worth the name of an epidemic. A few days after, the new Governor arrived, and next day his steward, a white man, was seized and died in eight hours, with a temperature of 109° F. Dr. Steventon made a post-mortem examination, and found the stomach loaded with black vomit. This was the last case. It is easy to connect the first seven cases, beginning with Mr. Crichton, and ending with Mrs. Brookes. Mr. Crichton went to General Mann, apparently well, on the 25th July, sickened on the 26th, and died on the 29th. His shirt was not discovered for a week after; then it was burnt. By this time the local atmosphere was contaminated, and every person in the house was infected. I think the germ theory of disease receives some support from these cases; it seems to me that what has been discovered with regard to splenic and relapsing fevers may apply to yellow fever, and, perhaps, to other types of fever also. I am more convinced than ever that the successful treatment of yellow fever depends on attacking it very early, and judiciously feeding the patient. During the febrile stage medicine may do good, but as soon as the temperature falls to 99°, nourishment, stimulants, and care must do the rest. In all cases of recovery the urine becomes suddenly alkaline as soon as the albumen and acidity disappear; the urine then effervesces on the addition of nitric acid. Black vomit and the fæces are both acid. Does this sudden alkalinity point out any treatment as likely to counteract this extremely acid condition of the system? A curious feature of the disease is the variation in temperature of different parts of the body, such as 106° in axilla, 100° in other parts, and the extremities quite cold. This is a most unfavourable symptom. Yellow fever is the most treacherous disease I know of; it requires careful observation and much experience to guide one in forming a prognosis; the changes are sudden and rapid. You can imagine what a time I have had, working day and night with much anxiety and responsibility. Dr. Steventon ably assisted me in our many consultations. The panic has now subsided, but it was carried to an absurd extent. With all my work I managed to keep very good health."

Now, Sir, I think the above abstract amply proves that, in addition to the names mentioned in Dr. Cole's letter, Jamaica possesses another physician who is capable of treating yellow fever successfully. There has been at this time no real epidemic of yellow fever. It would appear that the violence of that disease in Jamaica is greatly less than it was in former years long ago. During the three years I was there only two cases occurred among the troops, and both these in men much depressed by sudden grief. This agrees with Dr. Cargill's remark that the Lieutenant-Governor was much depressed by his grief for his lost son and daughter.

I have much pleasure in bearing testimony to the professional ability of our brethren in Jamaica.

I am, Sir, yours faithfully,

Leamington, Oct. 15th, 1877. JAMES THOMPSON, M.D.

GUNSHOT FRACTURES OF THE SKULL.

To the Editor of THE LANCET.

SIR,—I have read carefully Dr. Oscar J. Coskerry's letter on the above subject, and fail to see that he has thrown the smallest degree of light on the interesting fact that the inner table of the skull is more splintered than the outer in ordinary depressed fractures.

I presume Dr. Coskerry has not studied Erichsen's "Surgery," or he would not say "all works on surgery" teach that this splintering depends on the greater brittleness of the inner table. In that work there are two other theories mentioned to explain the circumstance. The author's is that there is a loss of momentum in passing through the outer table; the inner table being splintered more widely than the outer one, for the same reason that the aperture of exit made by a bullet is larger than that of entry." Further on we find Mr. Teevan's explanation, which is that the aperture of entrance is caused by the penetrating body only, whilst the aperture of exist is caused by this, *plus* the fragments of bone driven out of that table of the skull which was first perforated.

The explanation Dr. Coskerry advances is the absence of support on the side most splintered, which, I think, is hardly warranted by the illustration mentioned,—namely, a plate-glass window.

With all due deference to so high an authority as Mr. Erichsen, I must say I do not consider his explanation very satisfactory; because it would be easy to imagine a bullet in one case striking the inner table of the skull with an initial momentum equal to that which was lost in traversing the outer table in another case; yet the same thing would take place in both,—namely, greater splintering of the inner table.

Mr. Teevan's theory is disposed of by Mr. Erichsen when he says, "In the ordinary 'punctured' fracture made, for instance, by the point of a nail being driven through the skull, it must be remembered that no fragments of the outer table or diplöe are carried onwards, and that the very

wide splintering of the inner table which is so characteristic of this injury cannot be accounted for in this way."

I think the true explanation of the greater splintering of the inner table is—when a bullet strikes an object, its momentum is diffused in a manner radiating from the point struck, and therefore the plate of bone which receives the largest area of momentum is most splintered, and this splintering is greatly favoured by the diploë allowing of free separation of the two plates of the skull, and the arched shape of the cranium naturally tending to further diffuse the shock. Of course this latter would have no influence when the blow is received from within outwards.

I have witnessed greater loss of substance on the side opposite that which was struck, not only in plate-glass, but also in moderately thick ice on a pond (where there could be no want of support), and in the walls of houses struck by cannon-balls; and to my mind the only explanation is to be found in the diffusion of momentum.

I am, Sir, yours truly,

HENRY R. RUCKLEY, L.R.C.S.I., &c.

High Wycombe, 10th October, 1877.

"THE CATGUT LIGATURE."

To the Editor of THE LANCET.

THE following cases may probably be instructive, as showing the advantages of catgut ligature over silk in the treatment of varicocele.

On April 6th of the present year I performed the operation for cure of double varicocele by ligature. A straight needle threaded with silk was passed between the vas deferens and the veins, which was then made to re-enter where it had come out, care being taken to keep the point close to the scrotum until it reached the first puncture, it was then passed out, and the veins tied in the loop of silk, the ends were left long, and were twisted round a piece of quill, and tightened every day. The progress of this case was most tedious, the suppuration causing considerable annoyance. The first ligature separated on the twelfth day, but the second not until the twenty-first.

On the 19th of July I had occasion to perform a similar operation for varicocele of the left side, but determined to use carbolized catgut instead of silk or wire. The operation was done as I have just described, medium-sized catgut being used. No suppuration ensued. A firm mass of about the size of a nut was formed around the ligature. The man sat up on the third day, his testicles being supported by a suspender; and on the 30th of July he passed from under my care to all appearances cured.

A third case was operated upon on the 16th of this month in a similar way to the last. There was neither pain, suppuration, nor increase of temperature. The young man got up on the third day, and when his scrotum is suspended he can walk about his room with comfort.

All three operations were undertaken for the cure of nocturnal seminal emissions.

Swansea, Oct. 21st, 1877. GEO. MOWAT.

THE GOLDEN-SQUARE HOSPITAL.

To the Editor of THE LANCET.

SIR,—In your notice about the recent inquiry into the medical management of the Throat Hospital in Golden-square, it is stated that, in fairness to Dr. Mackenzie, and in the interests of the public, it is undesirable that the evidence should be permanently suppressed. As one who was present at that inquiry, perhaps you will allow me to call your attention to the fact that there was a shorthand writer in attendance on behalf of Dr. Mackenzie and the Throat Hospital Committee. If, therefore, he and his supporters are of opinion that the evidence taken at the inquiry, which, it is stated, has resulted in the withdrawal of the patronage of their Royal Highnesses the Prince and Princess of Wales from the hospital, did not prove that the medical department was mismanaged, it is for them to publish the full report of the proceedings. Upon this supposition, any delay on the part of the Hospital Committee in publishing the evidence seems most undesirable, and it is certainly very prejudicial to the interests of the hospital.

As it appears that the other members of the medical staff have expressed their opinion that the charges brought against Dr. Mackenzie are unfounded, and as none of them were present at the inquiry, and no material witnesses, to my knowledge, have been brought before them since that inquiry took place, it will be interesting to know by whom the charges were submitted to them for consideration, and upon what evidence they based their opinion.

I remain, Sir, your obedient servant,

H. K. EVANS,

Late Secretary of the Throat Hospital.

Carlton-hill, St. John's-wood, N.W., Oct. 22nd, 1877.

To the Editor of THE LANCET.

SIR,—Referring to your annotation in this week's LANCET on the inquiry into the management of the Throat Hospital in Golden-square, I think it is not only due to Dr. Morell Mackenzie, but to the profession of which he is a member, that the report of the Committee of Inquiry should be made public without further delay. It is difficult to believe that the Prince and Princess of Wales, who are so kindly disposed towards all deserving medical charities, can have withdrawn their support from the Golden-square Hospital without good reason for doing so; and the action of the Council of the Hospital Sunday Fund is, to say the least of it, suggestive of mismanagement. In the interests of all concerned, then, it is desirable that the whole truth should be known.

I remain, Sir, your obedient servant,

A FELLOW OF THE COLLEGE OF PHYSICIANS.

London, Oct. 20th, 1877.

PARIS.

(*From our own Correspondent.*)

THE RECENT ILLNESS OF M. JULES SIMON.

As you are aware, M. Jules Simon, the eminent ex-Premier, has been recently exceedingly ill with anthrax on the neck. As I have already written you, the Minister had been long in indifferent health through his great labours during his recent exercise of power, and the very many difficulties he had to contend with at the time. The fact is that his health became so very much impaired that he was obliged to leave France, and seek some benefit from a journey to Italy. Lately he was taken with anthrax in the neck. This increased gradually during the space of a few days, M. Simon unfortunately neglecting to take proper care of himself, and continuing to devote himself to work and political labour. The anthrax was already enormous in size when he left Paris to go down to Piastres, in the south of France, where his son was canvassing for a seat in the new Chamber. There M. Jules Simon, after a speech of several hours and the fatigue of the journey, got so very bad that he could scarcely be brought back to Paris. The anthrax had now attained the sterno-cleido-mastoidians on both sides. M. Alphonse Guérin, the eminent surgeon to the Hôtel Dieu, was called in, and immediately performed a crucial incision after his usual subcutaneous method, to which he attaches considerable importance. This method consists in plunging the knife into the centre of the anthrax, and cutting away under the skin on to the limits of the diseased tissues, and even into the healthy tissue beyond. This, of course, is repeated four times, making a cross. The advantages of this method, according to M. Guérin, are considerable. They constitute the best method of treating anthrax, and far outstrip the two other methods of open incisions or not cutting at all. Be it as it may, it was very successful in this case. The cutting was followed by immediate relief, the general symptoms abated, the appetite returned, fever fell, and after a few days the ex-Premier was entirely well.

DONATIONS, &c., TO MEDICAL CHARITIES.—Mr. Harvie Farquhar, the Hon. Treasurer to the Victoria Hospital for Sick Children, Chelsea, has given £1000 towards the £4000 required for the purchase of land adjoining the present site. Colonel Gordon, of Fyvie Castle, has given £250 to the Aberdeen Royal Infirmary, as the first yearly instalment on account of a donation, in lieu of a legacy of £1000. The Corporation of the City of London have given £100 to Queen Charlotte's Lying-in Hospital.

Obituary.

W. R. BASHAM, M.D., F.R.C.P.

MANY of our readers will have read with regret the notice in our impression of last week of the death of William Richard Basham, for many years the senior physician of the Westminster Hospital. On Feb. 13th last, whilst attending the Weekly Board meeting of the Governors of that hospital, he was seized with an apoplectic attack, causing hemiplegia of the left side, but without loss of consciousness. He was at once, at his own request, put to bed in a private room at the hospital, where he remained for some weeks. Improvement slowly took place, and in May he was removed to his residence in Chester-street, and after another interval he gained sufficient strength to bear removal to Shepperton, where he had a small country house. On the 10th inst. he returned to London, and attempted to resume practice, but the strain proved too great for his mind in his debilitated state, and he died in an unexpected manner, notwithstanding the sedulous attention of his nephews, to whose care indeed the prolongation of his life was in great measure attributable.

Dr. Basham was born in 1804, and was in his seventy-fourth year at the time of his death. His parents were residents of Diss, Norfolk, but his earlier years were passed at Leiston, Suffolk, where he gained the strong physical development which carried him through so many years of active work. Originally intended for business and placed in a banking house, his energetic nature soon rebelled against the confinement of the desk, and he applied himself cheerfully to medicine. He entered the Westminster Hospital as a student, Jan. 5th, 1831, and from that day till the day of his death, identified himself with its fortunes. In 1833 he studied in Edinburgh, and in the following year he took his degree, and at once returned to the Westminster Hospital, and filled the post of clinical assistant in 1834–35. He then went a voyage to China, and was engaged in a skirmish with the Chinese in the Canton river, where he received a sabre cut in the leg, which, from the heat of the climate and want of proper attention, suppurated, leading to the formation of a large abscess in the calf of the leg; and he was wont to relate the difficulty he experienced in getting any of the men to open it, till at last, in desperation, he ripped it up himself from the ankle to the knee. On his return in 1838 he became a member of the College of Physicians. In 1849 he was appointed joint lecturer on medicine with Dr. Hamilton Roe, and also lecturer on materia medica; and in the following year became a fellow of the College of Physicians. In 1843 he was made physician to the hospital, on the resignation of Dr. John Bright; having in the previous year sharply contested the post with Dr. Kingston, by whom he was beaten. In 1855, on the retirement of Dr. Roe, the lecturership on medicine was confided exclusively to his hands, which appointment he held till 1871. Many were the anecdotes he could relate of the early days of the Westminster Hospital, before its removal to its present situation, when it occupied a dingy site in York-street, Westminster; where dissections were conducted under difficulties in cellars, and where stormy debates were held in the board-room; when Anthony White, the elder Lynn, Hale Thomson, and Guthrie were surgeons, and Burns and Bright were physicians: scenes happily now no longer enacted. In 1864–66 and 1873 Dr. Basham was censor of the College, and examiner in medicine in 1870–71. He was a well-known member of the Athenæum Club.

His professional work is sufficiently well known. A large number of cases under his superintendence have been reported from time to time in the journals, most of them bearing on the subject of renal disease. His first work was published in 1858, and was entitled "On Dropsy connected with Disease of the Kidneys (Morbus Brightii), and on some other Diseases of those Organs associated with Albuminous and Purulent Urine, illustrated with numerous Drawings from the Microscope." These last, which are admitted to be exceedingly faithful representations of the objects seen, he drew and in many instances coloured (after printing) with his own hand. In 1864 he was appointed to deliver the Croonian Lectures at the College of Physicians, and chose for his subject "The Significance of Dropsy as a Symptom of Renal, Cardiac, and Pulmonary Diseases." These were separately published with a considerable number of illustrations in the course of the same year. In 1870 he published a small work bearing the title of "Renal Diseases, a Clinical Guide to their Diagnosis and Treatment." His first work "On Dropsy" ran through three editions, the last being published in 1868, and in this he incorporated his Croonian Lectures. His last work was "Aids to Diagnosis of Diseases of the Kidneys," 1872. All these works bear the impress of a clear and sagacious mind, and give the results of a large amount of careful observation and research. He took the liveliest interest in his cases, and in those in which death occurred was invariably present in the post-mortem room to verify his diagnosis and explain to the students of the hospital the character of the disease.

Few men possessed wider culture. Besides his professional attainments, which were great, he was an excellent botanist, a skilful chemist, and a good microscopist. He was a rare draughtsman, and never returned from his short autumnal holiday without an addition to his portfolio of a score of singularly fresh and lively water-colour sketches of the scenery he had visited. These he would delight to show and discuss with a few friends after dinner, opening up pleasant subjects of discussion in geology or antiquarian lore, or in the dialect or ethnology of those amongst whom he had travelled. In his appearance, as well as in his manner, there was something that called to mind the portrait of Johnson. Careless of dress, a remnant of his sailor life, with a sailor-like roll in his walk, of portly frame, with a massive well-balanced head, and clear brown eye that sparkled kindly as he spoke, he thought clearly, and expressed himself with ease and vigour. Singularly active in his habits, he retired early to rest and rose at dawn, and for many years bathed in the Serpentine both winter and summer. During the latter period of his life he was obliged to give this up, owing to a severe attack of sciatica, but on recovery he still started from Shepperton at 7 o'clock, after an hour spent in gardening, to breakfast in town. He prided himself on his garden and gave away its produce with generous hand. No man, whilst he had health and strength, enjoyed life more keenly, and it was sad to those who knew him well to see the deep melancholy that settled on him during the last few months when enfeebled alike in mind and body he seemed to feel that he had done with life; yet, as long as his mind remained unclouded, he could still brighten up as a friend entered his room, and still talk to him over the old times, of which he had so many anecdotes.

Though many might be disposed to differ from him in his religious opinions, it must be admitted that they were not formed hastily. His folio copy of the Bible was filled from end to end with his own commentary, notes, and references, and there were few theological works of any celebrity which he had not carefully read and collated. He was the last man to be blindly led. A sound physician, a warm friend, a kind and hospitable host, he will live in the memories of those who knew him, as a man who scarcely attained the position which his talents ought to have given him, and as one of those of whom too few are left behind to show the simplicity of life and earnestness of character of a generation that has almost passed away. Throughout his illness he was attended by his old friends Sir George Burrows and Dr. Radcliffe.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At the last meeting of the Council the following Member was elected a Fellow of the College:—

Lowther, George, Nelson-street, Hull.

APOTHECARIES' HALL.—The following gentlemen passed the examination in the Science and Practice of Medicine and received certificates to practise on the 11th and 18th of October:—

Calhane, Fredk. William Slater, Cranfield-road, Brockley.
Dale, Henry Ridley, The Poplars, St. George's-square, N.W.
Hoole, Henry, Walthamstow, Essex.
Pain, Alfred, Coultings, Bridgwater.
Robey, William Jesse, Etruria, Staffordshire.

The following gentlemen also passed the Primary Professional Examination:—

Henry Garrard Jacob, Charing-cross Hospital; Charles Boards Richardson, and George Stokes Hatton, St. Thomas's Hospital; Edward Lyan, Guy's Hospital; Hy. Jas. Johnston-Lavis, University College.

UNIVERSITY OF DUBLIN. — The following degrees were conferred last week:—

BACHELOR IN MEDICINE.—Richard Henry D'Olier Duckworth.
DOCTOR IN MEDICINE.—George Goode, Charles Frederick Murray.
MASTER IN SURGERY.—Samuel Warren.

THE lecturers to the Royal College of Physicians for the ensuing year are—Dr. Bucknill, Lumleian; Dr. Pavy, Croonian; Dr. Ferrier, Gulstonian.

THE new ward in King's College Hospital, named in honour of the late Sir William Fergusson, has been opened. The hospital now contains 200 beds.

YORKSHIRE ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—At the annual meeting to be held on Wednesday, October 31st, 1877, in the Board-room of the Local Board of Health, Ilkley, Dr. H. P. Parsons will read a paper on "An improved method of applying Nessler's test for the estimation of Ammonia in Water Analysis. Mr. Goldie will also read a paper. The new sewerage works at Ilkley will be open to the inspection of any members who may wish to see them, and who will meet at the office of the Local Board of Health at 11.15 A.M.

BOOKS ETC. RECEIVED.

Journal of Psychological Medicine. Half-yearly Volume.
Dr. H. Von Ziemssen: Cyclopædia of the Practice of Medicine. Vol. XVI.
The Cosmopolitan Masonic Calendar, 1878.
C. Reade: The Woman-Hater.
C. H. Ralfe: An Inquiry into the General Pathology of Scurvy.
E. Cox on Degeneracy and Preservation of the Teeth.
D. A. H. Smith: Retarded Dilatation of the Os Uteri in Labour.
Dr. Heywood Smith: Practical Gynæcology.
W. Gilbert: Their Boots.
J. Rowley: Epochs of English History—the Settlement of the Constitution.
American Journal of the Medical Sciences. October.

Medical Appointments.

ANNANDALE, T., M.D., F.R.C.S.E., has been appointed Professor of Clinical Surgery at the University of Edinburgh, and to take charge of the wards of the Professorship in the Royal Infirmary, vice Lister, resigned.

BENNETT, W. H., F.R.C.S.E., has been appointed a Surgeon to the Belgrave Hospital for Children, vice Pick, resigned.

BOUGHTON, W. B., L.R.C.S.E. & L.M., has been appointed Medical Officer and Public Vaccinator for the Redmarley District of the Newent Union, vice Cecly, resigned.

BROWNE, H. W. L., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the South-West District of the West Bromwich Union, vice R. S. Browne, M.R.C.S.E., L.S.A.L., resigned.

CARLENDER, G. W., F.R.C.S.E., F.R.S., has been appointed Consulting Surgeon to the City of London Lying-in Hospital, vice Coulson, deceased.

COOK, J. W., M.D., has been reappointed Medical Officer of Health for the Tendring Rural Sanitary District, Essex, at £100 for one year.

CRISP, N., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Keynsham District of the Keynsham Union, Somersetshire, vice Lodge, resigned.

DAVIES, W., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Cardiganshire Prison, Cardigan, vice Nicott, resigned.

FARRANT, S., M.R.C.S.E., L.S.A.L., has been appointed Medical Examiner of Army Recruits for the Taunton District, and Medical Officer to the Taunton Post-office.

KELLY, C., M.D., M.R.C.P.I., has been reappointed Medical Officer of Health for the East Preston, Horsham, Midhurst, Petworth, Steyning, and Thakeham Rural, and the Littlehampton, West Worthing, and Worthing Urban, Sanitary Districts, at £600 per annum for three years.

KELLY, T. J., L.R.C.S.I., L.M., has been appointed Medical Officer, Public Vaccinator, &c., for the Oulart Dispensary District of the Enniscorthy Union, co. Wexford, vice Kenny, resigned.

KERSWILL, J. B., M.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 1 District of the St. German's Union, and Medical Officer of Health for the No. 1 Sub-district of the St. German's Rural Sanitary District, vice R. W. P. Kerswill, M.R.C.S.E., L.S.A.L., resigned.

LOWNDES, F. W., M.R.C.S.E., has been appointed Surgeon to the South Division of the Liverpool Borough Police Force, vice Fenton, deceased.

LYNCH, G., M.B., L.K.Q.C.P.I., has been appointed Physician to the Westminster General Dispensary, vice Hastings, resigned.

PEACOCK, T. B., M.D., F.R.C.P.L., has been appointed Consulting Physician to the Evangelical Protestant Deaconesses' Institution and Training Hospital, Tottenham.

STEWART, R., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Parish of Kirkmichael, Banffshire, vice Barrow, whose appointment has expired.

Births, Marriages, and Deaths.

BIRTHS.

BLACK.—On the 23rd inst., at Aytoun-street, Brixton, the wife of James Black, M.R.C.S.E., of a son.

CALDWELL.—On the 23rd inst., at Kennington-park, the wife of W. T. D. Caldwell, M.D. of a daughter.

DEANE-BUTCHER.—On the 22nd inst., at London-street, Reading, the wife of W. Deane-Butcher, M.R.C.S.E., of a daughter.

DEBENHAM.—On the 17th inst., at Heath House, Stepney, the wife of Robert Debenham, M.R.C.S.E., of a son.

ELLIOT.—On the 18th inst., at Cliffe House, Ruyton-of-the-Eleven-Towns, near Shrewsbury, the wife of Dr. Henry F. Elliot, of a daughter.

IRVINE.—On the 6th inst., at Mansfield-street, Cavendish-square, the wife of J. Pearson Irvine, M.D., of a son, who survived his birth a short time only.

LEE.—On the 3rd inst., at The Elms, Heckmondwike, the wife of Francis Boynton Lee, F.R.C.P.Ed., of a son.

PALMER.—On the 18th inst., at Whittington, Derbyshire, the wife of Ambrose Palmer, M.R.C.S.E., L.R.C.P.Ed., of a daughter.

THOMSON.—On the 20th ult., at Simla, the wife of Murray Thomson, M.D., of a daughter.

MARRIAGES.

FOURACRE—OSBALDESTON.—On the 17th inst., at the Parish Church, Islington, Robert Perriman Fouracre, M.R.C.S.E., to Hester-Jane, daughter of M. D. Osbaldeston, Esq.

PADLEY—THOMAS.—On the 16th inst., at St. Mary's, Swansea, George Padley, L.R.C.P.L., to Rose, daughter of the late Thomas Thomas, Esq.

DEATHS.

BONNEY.—On the 13th inst., at his residence, Elm House, Francis Augustus Burdett Bonney, L.R.C.S.Ed., L.S.A.L., aged 73.

CARR-JACKSON.—On the 23rd inst., at Harley-street, Cavendish-square, Rosa, the beloved wife of T. Carr-Jackson, F.R.C.S., and youngest daughter of the late Thos. Wakefield, Esq. Friends will kindly accept this intimation.

CASH.—On the 19th inst., at Bridge House, Matlock, Josiah Cash, L.R.C.P.Ed., M.R.C.S.E., aged 50.

CONWAY.—On the 5th ult., at Limerick, James Synan Conway, L.R.C.P.Ed., aged 35.

DOUGLAS.—On the 13th inst., at Croydon, Robert Green Douglas, L.R.C.P.Ed., aged 26.

ELAM.—On the 24th August, at Collingwood, Australia, Shrofield Elam, M.R.C.S.E., aged 27.

FOSS.—On the 14th inst., at Pembroke-road, Dublin, Henry Clinton Foss, L.R.C.S.I. & L.M., Surgeon-General, Army.

FREEMAN.—On the 17th inst., at Woodbridge, Henry Lankester Freeman, M.R.C.S., late of Saxmundham, in his 82nd year.

MOULT.—On the 10th ult., at Marple, Cheshire, Emanuel Downes Moult, L.S.A.L., aged 65.

SILVESTER.—On the 16th inst., at Tunbridge Wells, Thomas Hookham Silvester, M.R.C.P.L., aged 78.

TENNISWOOD.—On the 14th inst., at Norton, Stockton-on-Tees, George Tinniswood, M.D.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

DOMESTIC GAS POISONING.

WHEN may we hope to enjoy the long promised advantages of light by electricity? We are again on the verge of the long winter evenings, when to have our rooms pleasantly illuminated with gas is to undergo a process of poisoning, the more disastrous because, instead of directly producing the characteristic symptoms of defective blood oxygenation, the gas-polluted atmosphere insidiously lowers the tone of vitality, and establishes a condition favourable to disease. It would be difficult to overrate the importance of this household peril. Pictures are spoilt by gas, gilt mouldings are tarnished, the colours of decorated walls and ceilings fade, and men and women of delicate organisation are enfeebled and injured by the foul air in which gas is discharged and *supposed* to burn innocuously. The extent to which this evil works in the midst of domesticated families during the long evenings is not adequately appreciated. After the first few unpleasant experiences are over, the physical sensibility becomes inured to the immediate results of breathing an atmosphere charged, more or less heavily, with the products of combustion and unconsumed coal-gas. It is not creditable to the ingenuity of practical men that no method has yet been devised by which the advantages of gas as an illuminating agent may be secured without the drawback of slow poisoning, with the host of maladies a depressed vitality is sure to bring in its train. It is impossible to light the rooms of a small house from without, and not one of the vaunted systems of ventilation is satisfactory. The heated air is *not* drawn off in the chimney; the mephitic vapour does not pass out through the openings made for its exit. The more obviously a system of air currents "must" work, the more certainly does it break down. The laws of physics seem to be suspended, to the injury of health and the furtherance of discomfort. The inventor who shall help us out of this difficulty will deserve well of his fellow-citizens, and contribute in no small degree to the public good.

THE "HOWARD MEDAL" OF THE STATISTICAL SOCIETY.

WE are asked to announce the subject of the essay for 1878, and we have much pleasure in complying with the request. It is "The Effects of Health and Disease on Military and Naval Operations." "Candidates will be expected to refer to Howard's experiences in Russia," and the essays "are to be sent in on or before June 30th, 1878." May we be permitted to add that it will be well if on this occasion a thoroughly competent committee of examiners is selected! Everything depends on the efficiency of the administration in adjudicating these rewards of industry. The principles of statistical science may now, surely, be assumed to have been made plain. The Statistical Society cannot have laboured so well and so long in vain. It is perhaps too much to expect that a Society of the class should be especially well informed on the subject of vital statistics, or have mastered all the conditions of medical classification and the distribution of disease; but it is not asking more than we are entitled to ask, that the credit of the Society should not be weakened by casting even a secondary glamour of approval over works which violate the fundamental laws of comparison and inference. The brief history of this "Howard Medal" is not satisfactory, and, we think, if it is to be awarded year by year as a standing encouragement to research on subjects connected with medical work, there should be some sufficient guarantee that the enterprise rewarded shall be worthy of the "idea."

Libris Affixus should seek the advice of his teachers.

SALICYLIC ACID IN RHEUMATIC FEVER.

To the Editor of THE LANCET.

SIR,—I should be glad to know if any of your readers have met with dangerous cerebral symptoms during their treatment of rheumatic fever with salicylic acid.

A gentleman, aged twenty-eight, consulted me on the 24th ult., and by the symptoms I observed in him I had no difficulty in diagnosing rheumatic fever in its incipient stage. I ordered him to bed, and gave him a purge, to be followed in the morning by a mixture containing scruple doses of bicarbonate of potash and fifteen-minim doses of tincture of hyoscyamus—a treatment which a large experience in the army and in a country where "rheumatismus acutus" is very common has taught me to look upon as almost infallible.

When I visited my patient next day, I found his temperature rising, his joints swelling, his tongue thickly furred, and his pulse very quick.

On the third day his temperature had risen to 103·5°, but his skin had commenced to act very freely. He was suffering intense pain in every joint, his fingers especially being much swollen, and very painful.

On the fourth day his temperature had fallen to 102°, his pulse had improved, and a very free diaphoresis was evidently giving him relief.

On the fifth day he was about the same; but the pains, although moderated, were still severe. I agreed with my partner, Dr. Cooper Kea es, to try the effect of salicylic acid, and on the following morning I gave him a mixture containing ten grains of the acid in each dose, to be given every four hours. After taking two doses he expressed himself as being much relieved, and remarked to me that he felt the new medicine was doing him good; but he did not think he could take much more of it, as he thought it would make him sick, and he felt it was making his head ache.

On the morning of the seventh day I found him sitting up in bed, enjoying a breakfast-cup of tea and milk, surrounded by his family, who were laughing and talking with him. A mutual congratulation was passing between them upon the marvellous change which had taken place in him; for he had no pain, except in his head, and the joints, large and small, had quite recovered themselves. I must acknowledge I could not enter into the family happiness, for my common sense told me a specific poison was not to be got rid of in a few hours by any remedy. I examined him, and found his temperature to be 106·5°. His merriment was the result of exaltation of his cerebral functions, for his pupils were contracting, and I found he had been "talking nonsense." By this time forty grains of salicylic acid had been given him. I gave him no more; but applied myself to combating the cerebral symptoms, which were rapidly developing themselves. My efforts were futile, however; for he sank before night into a comatose state, and died at 9.30 P.M., on the seventh night from the seizure. I should be gratified to think my patient died from ordinary metastasis of the disease to his brain, and that it was not the result of a too sudden expulsion of the enemy from the outworks to the citadel by my salicylic acid treatment.

I remain, Sir, yours &c.,

Peckham-rye-common, Oct. 16th, 1877. HARVEY J. PHILPOT.

THE BIRMINGHAM WORKHOUSE AND THEIR MEDICAL OFFICER.

WE are glad to be able to state that Mr. Simpson, the medical officer of the Birmingham Workhouse, whose resignation had been called for by the Local Government Board in consequence of some charge of neglect which had been brought against him, is to be allowed with the full consent of the Board to retain his position. From the fact that Mr. Simpson has filled the onerous and important duties of medical officer to so vast and unwieldy an establishment as the Birmingham Workhouse for seven years without any complaint being made against him, there can be no doubt the Local Government Board used a wise discretion in acceding to the wish of the Birmingham guardians that Mr. Simpson should be retained in his office. We have more than once called attention to the inadequacy of the medical service of the Birmingham Workhouse, and we are not surprised that the Board have now advised the guardians to institute a prompt and searching investigation into the matters in question.

TRAVELLING EXPENSES TO ASSISTANTS.

L.R.C.P.—It is customary to allow travelling expenses; but it is customary to have an understanding to this effect, and, in the absence of this, *they cannot be enforced by law.*

Mr. Richard Thomas Jones.—Dr. Barnes on Diseases of Women; Dr. West or Dr. Ellis on Diseases of Children; Dr. Pavy on Food and Dietetics, Physiologically and Therapeutically Considered.

M. P. S.—A chemist and druggist, who thinks he has made a therapeutical discovery, cannot be judged severely if he turns his discovery to commercial account, or disposes of the secret on commercial terms. But it is not likely that any medical man will treat with him on such terms. The real discoveries in medicine are not generally made—though we quite admit the exceptions—out of the profession, and when they are it is not for the profession to *buy* them. The public is only too eager to purchase.

MORE OF FALLACY IN TROMMER'S TEST.

To the Editor of THE LANCET.

SIR,—My letter on the "Fallacy of Trommer's Test," in your impression of June 23rd, 1877, presented one side of the question. In this letter I desire to present the other side to the notice of the profession. In my first letter it was stated, and I think proved, that in a sample of urine the indication usually accepted as demonstrating the presence of sugar by means of Trommer's test might be obtained in the entire absence of sugar, and it was further shown by what means greater certainty in testing might be arrived at. In this letter I propose to show that the indication for sugar may not be obtained while at the same time sugar is actually present, and I will attempt further to point out a method whereby we may get reliable information regarding the presence or absence of sugar in any sample of urine. With this object in view it will be advisable to explain that the most reliable testing liquid is procured in the following manner:—To a neutral solution of sulphate of copper, free from iron and other impurities, add a neutral solution of tartrate of soda, and stir the mixture in the cold. In a short time a nearly white or slightly bluish precipitate of tartrate of copper will fall. Decant from this the supernatant fluid, and then wash the precipitate twice with cold water by decantation. Cover the precipitate with a moderately strong solution of caustic soda, and stir for a few minutes, when it will be found that the tartrate of copper will dissolve, forming a liquid of a deep-blue colour. Filter this solution into a glass-stoppered bottle, and preserve in a cool place away from the light. That this is an efficient testing liquid appears from the fact that if to a few fluid drachms of pure water we add a minute quantity of grape-sugar, and pour a small quantity of this feebly saccharine solution into a test-tube, and after rendering it slightly alkaline by means of a few drops of a clear solution of caustic soda, we then add of the testing liquid sufficient to produce a distinct and pretty strong blue colour, as soon as this mixture is brought to the boiling point a beautiful red or orange-red precipitate of suboxide of copper will be obtained, and that without delay. So much as regards an aqueous solution of sugar. But I find that frequently the case is quite different when urine instead of pure water is the solvent for sugar. I now know, from oft-repeated and carefully performed experiments, that there exist frequently in urine a substance or substances soluble in alcohol, which have the power of retarding the precipitation of suboxide of copper, even when sugar is known to be present. I submit the following proofs:—A patient, who had all the symptoms of diabetes mellitus, handed me a sample of his urine for examination. The urine was of high specific gravity, but free from albumen, and not loaded with urea, as was the case with the sample spoken of in my former letter. A quantity of the urine was evaporated to dryness on the water-bath. The dry residue was treated several times with boiling absolute alcohol, and the alcoholic solution filtered, and then evaporated to dryness. The alcoholic extract (which I observed, by the way, contained all the yellow-colouring matter of the urine) was dissolved in water, and again filtered. The filtrate, after being rendered alkaline by a few drops of clear solution of caustic soda, had added to it a little of the above-mentioned testing liquid, and was then boiled in a test-tube. The fluid changed from a blue to a green, and finally to a brownish colour; but no precipitate formed after boiling for a minute. I noted the time, and set the tube afloat in the water-bath, maintained at 212° F. In about twenty minutes there was a distinct precipitate of suboxide of copper. Repeated this experiment several times, and obtained with wonderful regularity the same succession of phenomena. To another portion of the same urine I added a notable quantity of grape-sugar, evaporated, treated with alcohol, filtered, &c., exactly as already described; but upon testing got no precipitate after a minute's boiling. Noted the time, and set the tube afloat in the water-bath, maintained at 212° F., and in about fifteen minutes there appeared an abundant precipitate of suboxide of copper. Repeated this also several times, and always with the same results. The tendency of the age, especially here, is to hurry over things, to shirk work, and the above shows, I think, conclusively that we may easily miss the sugar altogether if we are in too much of a hurry. I have found that some urines yield the test at once, owing to the absence in the alcoholic extract of substances which delay the precipitation; others yield the test only after a time, owing to the presence of such substances. Not all urines are alike in this particular. It will not do to omit the evaporation, extraction with alcohol, nor any of the other details, if we wish to obtain reliable results; for phosphates and some other substances, inorganic and organic, are precipitable by alkali, and when the liquid changes colour, as it will do in the entire absence of sugar, a precipitate may be obtained which even an experienced person might too hastily pronounce to be suboxide of copper, the precipitate being merely something resembling the suboxide, or it might even be the suboxide reduced by something which was not sugar. On the other hand, haste might lead to conclusions of an opposite kind. A great deal of the confusion which has hitherto existed in the matter of testing urine for sugar has arisen from the fact that writers of books are too prone to follow one another without careful and independent examination.

To sum up, I humbly submit my opinion that the following may be taken as a sure method of testing for sugar in urine:—Prepare the solution of tartrate of copper and of caustic soda as above described, and take special care that they contain no sedimentary matter. Evaporate the urine to dryness, extract with boiling absolute alcohol, and filter; evaporate again, dissolve in water, and filter once more. Apply the test as above described, and, if no precipitate is obtained, at once place the test-tube in the water-bath, maintained at at 212° F., and *wait* for half an hour. This waiting is of the uttermost importance. If at the end of half an hour a precipitate of suboxide of copper is obtained, sugar is certainly present; if no precipitate of suboxide of copper is obtained, sugar is certainly absent.

GEORGE HAY, M.D., Analytical Chemist.

I remain, Sir, yours truly,

Analytical Laboratory, Diamond-street, Allegheny City, Pennsylvania, U.S., Oct. 9th, 1877.

THE DRINK QUESTION.

SEVERAL pamphlets lie before us, all dealing, from various points of view, with the inexhaustible subject of alcoholism and intemperance. First comes Dr. Richardson's lecture, delivered at Cambridge, upon the Action of Alcohol on the Mind, powerful, eloquent, and apt in illustration, as all his writings are. The cause of total abstinence has gained much from having so earnest an advocate. Of a far different stamp—different as to manner, matter, and counsel—is the essay of Dr. J. P. Lewis, which bears the title of "The Human Body, or Temperance *v.* Tectotalism." Read before the Winchester Diocesan Conference, this well-meant attempt presents as curious a mixture of religion and popular science as could well be imagined, the outcome of it all being the advocacy of moderation as opposed to excess on the one hand and total abstinence on the other. Dr. Stephen Alford, dealing with the question from the social rather than the individual point of view, writes in his pamphlet on "Dipsomania" strongly in favour of inebriate asylums, such as are in vogue in America. For more detailed information regarding these institutians and their work we may refer to the *Quarterly Journal of Inebriety*, the first three numbers of which have been published. It is the organ of the American Association for the Cure of Inebriates, and its first number contains an account of the formation of that body, written by its president, Dr. Theodore Mason. A paper in the same number, by Dr. G. M. Beard, upon the Causes of the Recent Increase of Inebriety in America, is a valuable contribution to the question, "inebriety" being regarded as a neurosis, which has increased of late years just as other nervous disorders have increased. In fact, the view that intemperance is a disease to be met by careful treatment, mainly of the prophylactic kind, rather than a vice and a wilful offence against society, is the principal standpoint upon which the journal in question is based. One of the numbers contains a lengthy reply to the criticisms passed by Dr. Bucknill upon the management of the American inebriate asylums.

HERPES ZOSTER OF SUPRATROCHLEAR NERVE.

To the Editor of THE LANCET.

SIR,—The following case may prove of interest, as it shows the possibility of mistaking herpes zoster in its early stage for erysipelas of the face.

The patient is a coachman, aged about thirty years, previously healthy. Having been out the night before at a ball, in the morning noticed an oval blotch on the left side of his nose. It was rather painful; but he did not pay much attention to it, thinking it was of no importance. But on the third day after the appearance of the blotch his face began to swell, and the spot became very painful. He thought it was "the blast," the local name for erysipelas, and applied flour to his face, which gave some relief; but the swelling increased, and the lymphatic glands in his neck became enlarged and very painful, so much so that he came to me for relief, stating that he could not sleep at night on account of an intense pain in his head. It was evening when he arrived, and the light was just failing; but it looked so much like a case of erysipelas of the face that I did not make a very close examination at the time, and ordered him a simple tonic iron mixture, with a sleeping draught of croton chloral and a pill of colocynth and hyoscyamus to be taken first thing next morning; the application of flour to be continued. Next morning the face and left side of the head was much more swollen, though the draught had acted very well, giving him four hours' sleep. On removing the flour from his face, I discovered five well-marked herpetic spots situated over the distribution of the supratrochlear nerve, four of them in a very early stage, and the other more advanced, it being the original spot that he had first noticed. I now ordered him to keep his face smeared with the following preparation of glycolin:—Carbolic acid, four minims; gelatine, three drachms; glycerine and water, of each two ounces: to be boiled down to a jelly; the tonic mixture to be continued, and an anodyne liniment for his neck. Suffice it to say that the pain was much relieved after the first application of the glycolin, and next morning the swelling was greatly reduced, and the angry red blush had left the face. The original blotch still continued very painful, and was covered by a dark-red eschar; the four smaller spots faded away in four days, not annoying him further; but the primary spot remained painful for ten days, when the eschar dropped off, leaving a deep ulcer, which granulated from the bottom. I feel certain, had the glycolin been applied to this spot in time, as it was to the others, the result would have been equally successful.

I remain, Sir, faithfully yours,
CHARLES F. MURRAY, M.B., M.C.

Ashfield Beauparc, co. Meath, Oct. 1877.

Ex Eouts.—The cost of spending six months abroad of course varies with the tastes and ideas of the student. There are certain fixed quantities, such as the expense of travelling and the sum to be paid for courses of lectures, which can be accurately ascertained beforehand. The cost of lodging in the students' quarter, as well as the price of provisions, is extremely moderate in all the places named, and if a man inhabit one room (as is the invariable custom), and dine at a student's restaurant, he will find that thirty shillings a week will provide a full share of the necessities of life. If he estimate £20 for travelling, £40 for board and lodging, and £20 for fees, he will be probably within the mark. If he take £100 abroad with him, and if he be not always on the move (for it is locomotion that runs away with the money), he ought to return with a balance in hand.

A CORRECTION.

Dr. Hugo Sexftleben writes to us to correct a verbal error in a short article headed "Sanitary Science Afloat," in THE LANCET of the 13th inst. The words "*cattle* service" and "*cattle* ships" occurring in the fourth and fifth lines of the paragraph should have been printed "*cable* service" and "*cable* ships."

"THE WHITE WITCH OF DEVON."

A PRETENDER who has assumed, or acquired, the title of "White Witch of North Devon," has escaped punishment on a technical ground, "hard labour" having been added to his committal paper for formal purposes after a sentence which did not include that penalty. The quack was, it seems, in the habit of placing certain metal rods in the hands of his patients, and requiring them to strike a piece of metal. He also "ruled the planets" in behalf of the sick. For the defence it was alleged that the rods acted as electric apparatus, and that the planets also exerted a potent electrical influence. The plea set up did not satisfy the magistrate, and the "White Witch" was convicted. Now, as we have said, his conviction is quashed. It is in a sense astonishing that so much credulity, as the success of this man and other adventurers of his class implies, should be found in the presence of our daily increasing enlightenment. It cannot, however, be disguised that side by side with the extension of merely secular knowledge, there is a strong current of superstition which knows no diminution of force or popularity. To what is the strange persistence of this susceptibility due? This is a grave practical question. If the dupes of quackery were restricted to the uninstructed classes, it would be easy to understand the spread of crazy beliefs; but the ranks of those who yield homage to unattested authorities, and "believe in" unfelt and unseen influences, are recruited from the multitude of generally well-informed and even "strong-minded" folk. How is this to be explained?

Cullen.—We apprehend that if the Association is of a voluntary character, supported entirely by the voluntary subscriptions of its members, they have a right to employ any medical man they please. Certainly the election of one who has the diploma of the College of Surgeons, and is registered, is not likely to be easily invalidated. Objection to his not having a medical qualification would, at any rate, come with more grace from the members than from a defeated candidate.

H. J. D.—1. Parkes's Hygiene and Wilson's Handbook of Hygiene.—2. The Public Health Act, 1875.

MEDICAL ASSISTANTS.

To the Editor of THE LANCET.

SIR,—I made an appeal in your columns a short time since, which aimed at establishing a Society for the improvement of the position of medical assistants. I cannot stop here, if you will only do me the favour to lend your invaluable aid in what I am sure you will consider a good and noble cause.

I have thought of bringing to the notice of the public and the profession the disastrous evils of the present system of conducting some of their businesses. I have pondered over the different positions I have held during the last four years, such as open surgery, provident dispensary, pariah, club, union, and such like. But I think, instead of endeavouring to expose some of the most contemptible kinds of practice, I can do better by calling your attention to the disastrous state of the poor, underpaid, hard-worked, and too often disgraced assistant. I heard a sermon, in a small village church in the county of Middlesex, preached on behalf of the Curates' Augmentation Fund. It placed the minimum salary of the curate at £120 per annum. I thought of the poor, broken-hearted assistant in *our* profession when hearing of the miseries of a hand-to-mouth existence of the poorer members of our clergy, and I thought whether any Society could be started for the augmentation of the salaries of our underpaid assistants, and some means held out to them when in employment to contribute to such Society, which they could apply to in case of necessity or illness, and probably find a home for those who under pecuniary difficulties are unable to command a respectable appearance, and who find themselves thereby unable to succeed in securing an appointment.

Is there no philanthropist in our profession whose attention I can call to this really charitable object? Is there no one who will help me to bring this claim before the public? This war seems to command the sympathy of many, the Indian famine of thousands; but the terrible suffering of those at home seems to escape notice. Is it at all a difficult thing to get up a Workmen's Club? Why should it be more difficult to get up a Club for Medical Assistants?

Kindly find room for the insertion of this appeal, and if you can find any remarks to advocate the cause of this, which I could devote my whole life to secure, you will greatly oblige,

Yours truly,
Oct. 16th, 1877. CONSTANT READER.

"DOCTORED" BEER.

AT the Stafford Petty Sessions recently a publican was charged by the Inland Revenue authorities with having in his possession, and adulterating beer with, grains of paradise, whereby he had rendered himself liable to a penalty of £200. The defendant pleaded guilty, and the Bench imposed a fine of £50. The popular notion that the seeds of the *Amomum melegueta* have a deleterous effect on the system is wholly unwarranted, the grains being a staple article of consumption on the West Coast of Africa, and much esteemed as a seasoner to food. If nothing worse than grains of paradise are infused into malt liquors, the consumers of such need be under no apprehension as to possible evil consequences. The pernicious adulteration of which the Excise and public should beware is the cocculus indicus. It is a significant fact that while large quantities of this poisonous berry are annually imported into this country, the ostensible use for the same is almost *nil*. An ointment of cocculus was official in the British Pharmacopœia of 1864 (employed in certain skin affections), but is now quite discarded. It is not used in veterinary medicine in any way, and we are forced to the conclusion that the greater part received into this country is applied to illegal purposes—to "doctoring" beer and ale.

Student will be able to pursue the studies to which he refers at most of the large schools.

MONSTROSITY IN THE HORSE.

A CORRESPONDENT writes to us to the effect that he has recently seen on the Boulevards at Paris a horse with eight feet, the four extra feet growing out of the fetlocks of the horse. The case, we presume, is one of supernumerary digits, and is an instance of reversion. On the evolutionary theory, the horse is derived from some quadruped which possessed five complete digits on each foot, and the successive stages have been better followed out and lend more support to the theory of evolution than is the case with any other animal. The remains of horses almost identical with those now existing are found in the Quaternary and later Tertiary strata as far back as the Pliocene formation. But in the deposits of the earlier Pliocene and later Miocene period the bones of an animal—the hipparion—are found in which the two splint horns representing the first and third metacarpal and metatarsals of the horse are as long as the central bone, and to each of them a small three-jointed digit is attached. In still older deposits belonging to the earlier Miocene and later Eocene period, a distinctly three-toed animal—the anchitherium—existed; and at about the same period, or before, one—the mesohippus—with three toes and a splint-like rudiment of the fourth to the fore-limb, and three toes to the hind-leg. Lastly, in the orohippus, the oldest member of the equine series, there are four complete toes on the fore-limb and three on the hind. Our correspondent does not state the position of the supernumerary digit.

Surgeon B.—We think it pretty clear that our correspondent would have a good legal claim to payment.

ERRATUM.—In a paragraph relating to the Society of Medical Officers of Health in THE LANCET of last week, Dr. Thomas Stevenson is represented to be the medical officer of health for Paddington, whereas that post is held by Dr. *James* Stevenson. The former gentleman is medical officer of health for St. Pancras.

COMMUNICATIONS not noticed in the current number shall receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from — Sir W. Smart, London; Pr. Pavy, London; Dr. G. Harley, London; Dr. Buzzard; Brudenell Carter, London; Mr. Jackson, Plymouth; Mr. Davey, Romford; Dr. Samuels, San Francisco; Dr. Wilkinson, Crouch End; Dr. Page, Newcastle; Dr. Gordon, London; Mr. Holmes, Blockley; Mr. Abbott, London; Mr. Hamilton, Leeds; Dr. Seuftleben, London; Mr. Bennett, London; Mr. Lowndes, Liverpool; Dr. Corfield, London; Dr. Sturges, London; Dr. Walkey, London; Mr. Higgins, London; Dr. Philipson, Newcastle; Dr. Kerr, London; Dr. Eabelby, Stonehouse; Dr. Turnbull, Liverpool; Dr. Foote, Rotherham; Mr. Mowat, Swansea; Dr. Pritchard, Teynham; Mr. Hore, New York; Dr. Cook, Manningtree; Mr. Thomas, Birmingham; Mr. Borrows, Dunedin; Mr. Pithie, Cupar; Dr. G. Hay, Pennsylvania; Mr. Bradshaw, Florida; Dr. Whitehead, Manchester; Messrs. Savory and Moore, London; Dr. Tauffe, Brighton: Mr. Field, London; Dr. Reid, Durham; Mr. Manby, East Rudham; Dr. Hutchinson, Chipping Norton; Mr. Anderson, Yeddo; Messrs. Cooper and Co., Kensington; Mr. Evans, London; Mr. Joll, Hammersmith; Mr. Beaver, Manchester; Mr. Bright, Forest Hill; Messrs. Kilner Brothers, London; Mr. Tomkins, London; Mr. P. Thornton, London; Dr. Lister, Ashton; Dr. Davies, Swansea; Dr. Lucas, Southport; Dr. Watts, Dewsbury; Dr. Glissan, Wellington; Dr. Ryley, Leytonstone; Mr. Lund, Manchester; Mr. Adams; Dr. Pitman; Dr. Ballenden, Sedgley; Dr. Crabb, Birkenhead; Messrs. Beaman and Co.; Mr. Morgan; Mr. Macpherson; Dr. Moore, Coventry; Dr. Eade, Norwich; Dr. North; Mr. Hales, Holt; Mr. Bell, Bath; Mr. W. V. Jones; Dr. Phillips, Havre; Mr. Ferness; Messrs. Chalmers, Guthrie, and Co.; Dr. Dunwell, Hastings; Mr. Lean; Dr. Jack, Hampton Court; Messrs. Connell & Co., Glasgow; Dr. Sawyer, Birmingham; Mr. Jordison, Malpas; Mr. Oglesby, Leeds; Mr. E. Smith; Messrs. Sampson Low & Co., London; A Fourth-year's Man; Alcohol; The Director-General of the Medical Department of the Navy; J. S. G.; A Fellow of the College of Physicians; Studens, Madras; L.R.C.S & P.E.; J. V. R. C.; Libris Affixus; One who Knows and a Constant Reader; The Secretary of King's College Hospital; Nome de Plume; Osteology; A Sufferer from Typhoid; F.R.C.P. Edin.; Z. O. B.; F. D., Sheffield; Ozone; Reflex; Cullen; The Registrar-General of Births and Deaths; Chemical Research; L.R.C.P., Oldham; H. J. D.; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Maclehose, Glasgow; Mr. Brocklebank, London; Mr. Montgomery, Maidenhead; Mr. Dodgson, Rotherham; Mr. Fraser, Clitheroe; Mr. Hadden, Glasgow; Mr. Baldock, Coventry; Dr. Habershon, London; Dr. Collingwood, Corby; Mr. Wilders, Birmingham; Mr. Wheeler, Manchester; Mr. Hyde, Chelsea; Mr. Skrimshire, Clydach; Dr. Palmer, Whittingham; Dr. Lee, Heckmondwike; Dr. O'Donivan, Sligo; Mr. Reece; Dr. Baker, Wendover; Mr. Gregory; A. H. B.; H. L., York; Biceps; W. D.; A., Brackley; L.R.C.S. Ed.; X. Y. Z.; A. D. L.; Suture; Medicus, Brighton; M.D., Islington; R. W. T.; T. A.; A. B. C., Swansea; A. G., Bradford; B. E. A.; Medicus, Plumpstead; Trustee; Medicus, Blackburn; F. G. G., Leeds; Beta; L.R.C.P. Edin.; Medicus, Manchester; Galen: P. M. D., Bristol; B. A. M. B., Exeter; Medicus, Wrexford; W. A. M.; Medicus, New Brighton; Alpha, Edinburgh; Medicus, Flint; M. B., Glasgow; Medicus.

Weston-super-Mare Gazette, Dairyman, Hampshire Telegraph, Bicicling Times, City Press, Daily Courier, Reading Observer, and *Financial Opinion* have been received.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, OCT. 25TH, 1877.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8.30 A.M.
Oct. 19	30·34	W.	38	40	66	56	33	...	Foggy
,, 20	30·15	W.	45	49	90	63	38	...	Hazy
,, 21	29·91	S.W.	51	55	63	57	46	...	Overcast
,, 22	29·79	S.W.	55	57	92	63	53	0·06	Cloudy
,, 23	29·62	S.E.	47	49	50	57	45	0·04	Foggy
,, 24	29·54	W.	41	44	77	50	40	0·17	Fine!
,, 25	29·30	S.	51	52	...	54	42	0·25	Raining

Medical Diary for the ensuing Week.

Monday, Oct. 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8½ P.M. Dr. Lee, "On Maternal Impressions."—Clinical Cases and other communications.

Tuesday, Oct. 30.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

[Wednesday, Oct.] 31.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Nov. 1.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HARVEIAN SOCIETY.—8 P.M. Dr. W. H. Day, "On a Case of Hypertrophy of the Heart, with Chronic Albuminuria, in a Child."—Mr. Edmund Owen, "On Imperforate Rectum; Littre's Operation."—Mr. J. Carr Jackson, "On Lithotomy in a Patient aged seventy."—Dr. Ashburton Thompson, "On a Case of Death 4½ hours after delivery."

Friday, Nov. 2.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Nov. 3.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

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